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FALL PROMO 2025

FEATURING

PAGE 17

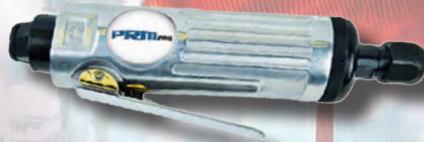
NOGA
SIMPLY SOPHISTICATED



S PROMO SET

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PRM PRO



AIR DIE GRINDERS

PAGE 28

PROCHECK ABSOLUTE



ELECTRONIC CALIPERS

PRICING VALID OCTOBER 1, 2025 - DECEMBER 31, 2025



A Brand® - ADO-SUS High Performance Carbide Drills



For Stainless Steel

- List 5210
- 5XD
- Coolant-Through
- WXL Coating
- 140° Point Angle

Drill Bit Size / Cutting Diameter (DC)	Decimal Equivalent	Connection Diameter Machine Side (DCONMS)	Usable Length (LU)	Overall Length (OAL)	Order No.	Regular Price	SALE
2 mm	-	3 mm	18 mm	70 mm	TP348667200	163.37	147.02
2.1 mm	-	3 mm	19 mm	70 mm	TP348667210	163.37	147.02
2.2 mm	-	3 mm	20 mm	70 mm	TP348667220	163.37	147.02
2.3 mm	-	3 mm	21 mm	70 mm	TP348667230	163.37	147.02
3/32"	0.0938"	3 mm	22 mm	70 mm	TP34521009312	163.37	147.02
2.4 mm	-	3 mm	22 mm	70 mm	TP348667240	163.37	147.02
2.5 mm	-	3 mm	23 mm	70 mm	TP348667250	163.37	147.02
2.6 mm	-	3 mm	24 mm	78 mm	TP348667260	163.37	147.02
2.7 mm	-	3 mm	25 mm	78 mm	TP348667270	163.37	147.02
2.76 mm	-	3 mm	25 mm	78 mm	TP348667276	163.37	147.02
2.78 mm	-	3 mm	26 mm	78 mm	TP348667278	163.37	147.02
2.8 mm	-	3 mm	26 mm	78 mm	TP348667280	163.37	147.02
2.9 mm	-	3 mm	27 mm	78 mm	TP348667290	163.37	147.02
3 mm	-	3 mm	27 mm	78 mm	TP348667300	163.37	147.02
3.1 mm	-	4 mm	28 mm	86 mm	TP348667310	169.12	152.20
3.15 mm	-	4 mm	29 mm	86 mm	TP348667315	169.12	152.20
1/8"	0.125"	1/8"	29 mm	86 mm	TP34521012512	169.12	152.20
3.2 mm	-	4 mm	29 mm	86 mm	TP348667320	169.12	152.20
3.26 mm	-	4 mm	29 mm	86 mm	TP348667326	169.12	152.20
3.3 mm	-	4 mm	30 mm	86 mm	TP348667330	169.12	152.20
3.4 mm	-	4 mm	31 mm	86 mm	TP348667340	169.12	152.20
3.5 mm	-	4 mm	32 mm	86 mm	TP348667350	169.12	152.20
3.6 mm	-	4 mm	33 mm	86 mm	TP348667360	170.90	153.80
3.66 mm	-	4 mm	33 mm	86 mm	TP348667366	170.90	153.80
3.68 mm	-	4 mm	34 mm	86 mm	TP348667368	170.90	153.80
3.7 mm	-	4 mm	34 mm	86 mm	TP348667370	170.90	153.80
3.75 mm	-	4 mm	34 mm	86 mm	TP348667375	170.90	153.80
3.8 mm	-	4 mm	35 mm	86 mm	TP348667380	170.90	153.80
3.9 mm	-	4 mm	36 mm	86 mm	TP348667390	170.90	153.80
5/32"	0.1563"	4 mm	36 mm	86 mm	TP34521015612	170.90	153.80
4 mm	-	4 mm	36 mm	86 mm	TP348667400	170.90	153.80
#20	-	6 mm	37 mm	95 mm	TP34521016112	175.46	157.92
4.1 mm	-	5 mm	37 mm	95 mm	TP348667410	175.46	157.92
4.1 mm	-	6 mm	37 mm	95 mm	TP348667410	175.46	157.92
4.2 mm	-	5 mm	38 mm	95 mm	TP348667420	175.46	157.92
4.2 mm	-	6 mm	38 mm	95 mm	TP348667420	175.46	157.92
4.3 mm	-	5 mm	39 mm	95 mm	TP348667430	175.46	157.92
4.3 mm	-	6 mm	39 mm	95 mm	TP348667430	175.46	157.92
11/64"	0.1719"	3/16"	40 mm	95 mm	TP34521017112	175.46	157.92
4.4 mm	-	5 mm	40 mm	95 mm	TP348667440	175.46	157.92
4.4 mm	-	6 mm	40 mm	95 mm	TP348667440	175.46	157.92
4.5 mm	-	5 mm	41 mm	95 mm	TP348667450	175.46	157.92
4.5 mm	-	6 mm	41 mm	95 mm	TP348667450	175.46	157.92
4.6 mm	-	5 mm	42 mm	95 mm	TP348667460	179.42	161.47
4.6 mm	-	6 mm	42 mm	95 mm	TP348667460	179.42	161.47
4.62 mm	-	5 mm	42 mm	95 mm	TP348667462	179.42	161.47
4.64 mm	-	5 mm	42 mm	95 mm	TP348667464	179.42	161.47
4.7 mm	-	5 mm	43 mm	95 mm	TP348667470	179.42	161.47
4.7 mm	-	6 mm	43 mm	95 mm	TP348667470	179.42	161.47
3/16"	0.1875"	3/16"	44 mm	95 mm	TP34521018712	179.42	161.47
4.8 mm	-	5 mm	44 mm	95 mm	TP348667480	179.42	161.47
4.8 mm	-	6 mm	44 mm	95 mm	TP348667480	179.42	161.47
4.85 mm	-	6 mm	44 mm	95 mm	TP348667485	179.42	161.47
4.9 mm	-	5 mm	45 mm	95 mm	TP348667490	179.42	161.47
4.9 mm	-	6 mm	45 mm	95 mm	TP348667490	179.42	161.47
5 mm	-	5 mm	45 mm	95 mm	TP348667500	179.42	161.47
5 mm	-	6 mm	45 mm	95 mm	TP348667500	179.42	161.47
5.1 mm	-	6 mm	41 mm	100 mm	TP348667510	189.99	170.99
13/64"	0.2031"	1/4"	42 mm	100 mm	TP34521020312	189.99	170.99
5.2 mm	-	6 mm	42 mm	100 mm	TP348667520	189.99	170.99
5.25 mm	-	6 mm	42 mm	100 mm	TP348667525	189.99	170.99
5.3 mm	-	6 mm	43 mm	100 mm	TP348667530	189.99	170.99
5.4 mm	-	6 mm	44 mm	100 mm	TP348667540	189.99	170.99

Drill Bit Size / Cutting Diameter (DC)	Decimal Equivalent	Connection Diameter Machine Side (DCONMS)	Usable Length (LU)	Overall Length (OAL)	Order No.	Regular Price	SALE
#3	-	6 mm	44 mm	100 mm	TP34521021312	189.99	170.99
5.5 mm	-	6 mm	44 mm	100 mm	TP348667550	189.99	170.99
5.52 mm	-	6 mm	45 mm	100 mm	TP348667552	200.59	180.53
5.54 mm	-	6 mm	45 mm	100 mm	TP348667554	200.59	180.53
7/32"	0.2188"	1/4"	45 mm	100 mm	TP34521021812	200.59	180.53
5.6 mm	-	6 mm	45 mm	100 mm	TP348667560	200.59	180.53
5.7 mm	-	6 mm	46 mm	100 mm	TP348667570	200.59	180.53
5.8 mm	-	6 mm	47 mm	100 mm	TP348667580	200.59	180.53
5.9 mm	-	6 mm	48 mm	100 mm	TP348667590	200.59	180.53
15/64"	0.2344"	1/4"	48 mm	100 mm	TP34521023412	200.59	180.53
6 mm	-	6 mm	48 mm	100 mm	TP348667600	200.59	180.53
6.1 mm	-	7 mm	49 mm	109 mm	TP348667610	200.59	180.53
6.1 mm	-	8 mm	49 mm	109 mm	TP348667610	200.59	180.53
6.2 mm	-	7 mm	50 mm	109 mm	TP348667620	200.59	180.53
6.2 mm	-	8 mm	50 mm	109 mm	TP348667620	200.59	180.53
6.25 mm	-	7 mm	50 mm	109 mm	TP348667625	200.59	180.53
6.3 mm	-	7 mm	51 mm	109 mm	TP348667630	200.59	180.53
6.3 mm	-	8 mm	51 mm	109 mm	TP348667630	200.59	180.53
1/4"	0.25"	1/4"	52 mm	109 mm	TP348667635	200.59	180.53
6.4 mm	-	7 mm	52 mm	109 mm	TP348667640	200.59	180.53
6.4 mm	-	8 mm	52 mm	109 mm	TP348667640	200.59	180.53
6.5 mm	-	7 mm	52 mm	109 mm	TP348667650	200.59	180.53
6.5 mm	-	8 mm	52 mm	109 mm	TP348667650	200.59	180.53
F	-	8 mm	53 mm	109 mm	TP34521025712	212.56	191.31
6.6 mm	-	7 mm	53 mm	109 mm	TP348667660	212.56	191.31
6.6 mm	-	8 mm	53 mm	109 mm	TP348667660	212.56	191.31
6.7 mm	-	7 mm	54 mm	109 mm	TP348667670	212.56	191.31
6.7 mm	-	8 mm	54 mm	109 mm	TP348667670	212.56	191.31
17/64"	0.2656"	5/16"	55 mm	109 mm	TP34521026512	212.56	191.31
6.75 mm	-	7 mm	54 mm	109 mm	TP348667675	212.56	191.31
6.8 mm	-	7 mm	55 mm	109 mm	TP348667680	212.56	191.31
6.8 mm	-	8 mm	55 mm	109 mm	TP348667680	212.56	191.31
6.9 mm	-	7 mm	56 mm	109 mm	TP348667690	212.56	191.31
6.9 mm	-	8 mm	56 mm	109 mm	TP348667690	212.56	191.31
7 mm	-	7 mm	56 mm	109 mm	TP348667700	236.22	212.60
7 mm	-	8 mm	56 mm	109 mm	TP348667700	236.22	212.60
7.1 mm	-	8 mm	57 mm	118 mm	TP348667710	249.49	224.54
9/32"	0.2813"	5/16"	58 mm	118 mm	TP34521028112	249.49	224.54
7.2 mm	-	8 mm	58 mm	118 mm	TP348667720	249.49	224.54
7.25 mm	-	8 mm	58 mm	118 mm	TP348667725	249.49	224.54
7.3 mm	-	8 mm	59 mm	118 mm	TP348667730	249.49	224.54
7.36 mm	-	8 mm	59 mm	118 mm	TP348667736	249.49	224.54
7.38 mm	-	8 mm	60 mm	118 mm	TP348667738	249.49	224.54
7.4 mm	-	8 mm	60 mm	118 mm	TP348667740	249.49	224.54
7.5 mm	-	8 mm	60 mm	118 mm	TP348667750	249.49	224.54
7.52 mm	-	8 mm	61 mm	118 mm	TP348667752	249.49	224.54
19/64"	0.2969"	5/16"	60 mm	118 mm	TP34521029612	263.80	237.42
7.6 mm	-	8 mm	61 mm	118 mm	TP348667754	263.80	237.42
7.6 mm	-	8 mm	61 mm	118 mm	TP348667760	263.80	237.42
7.7 mm	-	8 mm	62 mm	118 mm	TP348667770	263.80	237.42
7.75 mm	-	8 mm	62 mm	118 mm	TP348667775	263.80	237.42
7.8 mm	-	8 mm	63 mm	118 mm	TP348667780	263.80	237.42
7.9 mm	-	8 mm	64 mm	118 mm	TP348667790	263.80	237.42
5/16"	0.3125"	5/16"	64 mm	118 mm	TP34521031212	263.80	237.42
8 mm	-	8 mm	64 mm	118 mm	TP348667800	263.80	237.42
8.1 mm	-	9 mm	65 mm	128 mm	TP348667810	290.39	261.35
8.1 mm	-	10 mm	65 mm	128 mm	TP348667810	290.39	261.35
8.2 mm	-	9 mm	66 mm	128 mm	TP348667820	290.39	261.35
8.2 mm	-	10 mm	66 mm	128 mm	TP348667820	290.39	261.35
8.25 mm	-	9 mm	66 mm	128 mm	TP348667825	290.39	261.35
8.3 mm	-	9 mm	67 mm	128 mm	TP348667830	290.39	261.35
8.3 mm	-	10 mm	67 mm	128 mm	TP348667830	290.39	261.35
21/64"	0.3281"	3/8"	67 mm	128 mm	TP34521032812	290.39	261.35
8.4 mm	-	9 mm	68 mm	128 mm	TP348667840	290.39	261.35
8.4 mm	-	10 mm	68 mm	128 mm	TP348667840	290.39	261.35
Q	-	10 mm	68 mm	128 mm	TP34521033212	290.39	261.35
8.5 mm	-	9 mm	68 mm	128 mm	TP348667850	290.39	261.35
8.5 mm	-	10 mm	68 mm	128 mm	TP348667850	290.39	261.35
8.6 mm	-	9 mm	69 mm	128 mm	TP348667860	302.97	272.67
8.6 mm	-	10 mm	69 mm	128 mm	TP348667860	302.97	272.67
8.7 mm	-	9 mm	70 mm	128 mm	TP348667870	302.97	272.67
8.7 mm	-	10 mm	70 mm	128 mm	TP348667870	302.97	272.67
11/32"	0.3438"	3/8"	70 mm	128 mm	TP34521034312	302.97	272.67
8.75 mm	-	9 mm	70 mm	128 mm	TP348667875	302.97	272.67
8.8 mm	-	9 mm	71 mm	128 mm	TP348667880	302.97	272.67



Drill Bit Size / Cutting Diameter (DC)	Decimal Equivalent	Connection Diameter Machine Side (DCONMS)	Usable Length (LU)	Overall Length (OAL)	Order No.	Regular Price	SALE
8.8 mm	-	10 mm	71 mm	128 mm	TP348682880	302.97	272.67
8.9 mm	-	9 mm	72 mm	128 mm	TP348667890	302.97	272.67
8.9 mm	-	10 mm	72 mm	128 mm	TP348682890	302.97	272.67
9 mm	-	9 mm	72 mm	128 mm	TP348667900	302.97	272.67
9 mm	-	10 mm	72 mm	128 mm	TP348682900	302.97	272.67
9.1 mm	-	10 mm	73 mm	136 mm	TP348667910	317.90	286.10
23/64"	0.3594"	3/8"	73 mm	136 mm	TP34521035912	317.90	286.10
9.2 mm	-	10 mm	74 mm	136 mm	TP348667920	317.90	286.10
9.24 mm	-	10 mm	74 mm	136 mm	TP348667924	317.90	286.10
9.25 mm	-	10 mm	74 mm	136 mm	TP348667925	317.90	286.10
9.26 mm	-	10 mm	75 mm	136 mm	TP348667926	317.90	286.10
9.3 mm	-	10 mm	75 mm	136 mm	TP348667930	317.90	286.10
9.36 mm	-	10 mm	75 mm	136 mm	TP348667936	317.90	286.10
9.38 mm	-	10 mm	76 mm	136 mm	TP348667938	317.90	286.10
9.4 mm	-	10 mm	76 mm	136 mm	TP348667940	317.90	286.10
9.5 mm	-	10 mm	76 mm	136 mm	TP348667950	317.90	286.10
9.52 mm	-	10 mm	77 mm	136 mm	TP348667952	346.77	312.08
3/8"	0.375"	3/8"	76 mm	136 mm	TP34521037512	346.77	312.08
9.54 mm	-	10 mm	77 mm	136 mm	TP348667954	346.77	312.08
9.6 mm	-	10 mm	77 mm	136 mm	TP348667960	346.77	312.08
9.7 mm	-	10 mm	78 mm	136 mm	TP348667970	346.77	312.08
9.75 mm	-	10 mm	78 mm	136 mm	TP348667975	346.77	312.08
9.8 mm	-	10 mm	79 mm	136 mm	TP348667980	346.77	312.08
9.9 mm	-	10 mm	80 mm	136 mm	TP348667990	346.77	312.08
25/64"	0.3906"	7/16"	80 mm	136 mm	TP34521039012	346.77	312.08
10 mm	-	10 mm	80 mm	136 mm	TP348668000	346.77	312.08
10.1 mm	-	11 mm	81 mm	146 mm	TP348668010	372.43	335.18
10.1 mm	-	12 mm	81 mm	146 mm	TP348668010	372.43	335.18
10.2 mm	-	11 mm	82 mm	146 mm	TP348668020	372.43	335.18
10.2 mm	-	12 mm	82 mm	146 mm	TP348668020	372.43	335.18
10.25 mm	-	11 mm	82 mm	146 mm	TP348668025	372.43	335.18
10.3 mm	-	11 mm	83 mm	146 mm	TP348668030	372.43	335.18
10.3 mm	-	12 mm	83 mm	146 mm	TP348668030	372.43	335.18
13/32"	0.4063"	7/16"	83 mm	146 mm	TP34521040612	372.43	335.18
10.4 mm	-	11 mm	84 mm	146 mm	TP348668040	372.43	335.18
10.4 mm	-	12 mm	84 mm	146 mm	TP348668040	372.43	335.18
10.5 mm	-	11 mm	84 mm	146 mm	TP348668050	372.43	335.18
10.5 mm	-	12 mm	84 mm	146 mm	TP348668050	372.43	335.18
10.6 mm	-	11 mm	85 mm	146 mm	TP348668060	384.34	345.91
10.6 mm	-	12 mm	85 mm	146 mm	TP348668060	384.34	345.91
10.7 mm	-	11 mm	86 mm	146 mm	TP348668070	384.34	345.91
10.7 mm	-	12 mm	86 mm	146 mm	TP348668070	384.34	345.91
27/64"	0.4219"	7/16"	86 mm	146 mm	TP34521042212	384.34	345.91
10.75 mm	-	11 mm	86 mm	146 mm	TP348668075	384.34	345.91
10.8 mm	-	11 mm	87 mm	146 mm	TP348668080	384.34	345.91
10.8 mm	-	12 mm	87 mm	146 mm	TP348668080	384.34	345.91
10.9 mm	-	11 mm	88 mm	146 mm	TP348668090	384.34	345.91
10.9 mm	-	12 mm	88 mm	146 mm	TP348668090	384.34	345.91
11 mm	-	11 mm	88 mm	146 mm	TP348668100	384.34	345.91
11 mm	-	12 mm	88 mm	146 mm	TP348668100	384.34	345.91
11.1 mm	-	12 mm	89 mm	156 mm	TP348668110	398.66	358.79
7/16"	0.4375"	7/16"	89 mm	156 mm	TP34521043812	398.66	358.79
11.2 mm	-	12 mm	90 mm	156 mm	TP348668120	398.66	358.79
11.22 mm	-	12 mm	90 mm	156 mm	TP348668122	398.66	358.79
11.24 mm	-	12 mm	90 mm	156 mm	TP348668124	398.66	358.79
11.3 mm	-	12 mm	91 mm	156 mm	TP348668130	398.66	358.79
11.36 mm	-	12 mm	91 mm	156 mm	TP348668136	398.66	358.79
11.38 mm	-	12 mm	92 mm	156 mm	TP348668138	398.66	358.79
11.4 mm	-	12 mm	92 mm	156 mm	TP348668140	398.66	358.79
11.5 mm	-	12 mm	92 mm	156 mm	TP348668150	429.25	386.33
29/64"	0.4531"	1/2"	92 mm	156 mm	TP34521045312	444.65	400.19
11.6 mm	-	12 mm	93 mm	156 mm	TP348668160	444.65	400.19
11.7 mm	-	12 mm	94 mm	156 mm	TP348668170	444.65	400.19
11.8 mm	-	12 mm	95 mm	156 mm	TP348668180	444.65	400.19
11.9 mm	-	12 mm	96 mm	156 mm	TP348668190	444.65	400.19
12 mm	-	12 mm	96 mm	156 mm	TP348668200	444.65	400.19
12.1 mm	-	13 mm	97 mm	167 mm	TP348668210	444.65	400.19
12.1 mm	-	14 mm	97 mm	167 mm	TP348668210	444.65	400.19
12.2 mm	-	13 mm	98 mm	167 mm	TP348668220	444.65	400.19
12.2 mm	-	14 mm	98 mm	167 mm	TP348668220	444.65	400.19
12.3 mm	-	13 mm	99 mm	167 mm	TP348668230	444.65	400.19
12.3 mm	-	14 mm	99 mm	167 mm	TP348668230	444.65	400.19
31/64"	0.4844"	1/2"	99 mm	167 mm	TP34521048512	444.65	400.19
12.4 mm	-	13 mm	100 mm	167 mm	TP348668240	444.65	400.19
12.4 mm	-	14 mm	100 mm	167 mm	TP348668240	444.65	400.19

Drill Bit Size / Cutting Diameter (DC)	Decimal Equivalent	Connection Diameter Machine Side (DCONMS)	Usable Length (LU)	Overall Length (OAL)	Order No.	Regular Price	SALE
12.5 mm	-	13 mm	100 mm	167 mm	TP348668250	444.65	400.19
12.5 mm	-	14 mm	100 mm	167 mm	TP348683250	444.65	400.19
12.6 mm	-	13 mm	101 mm	167 mm	TP348668260	459.96	413.96
12.6 mm	-	14 mm	101 mm	167 mm	TP348683260	459.96	413.96
1/2"	0.5"	1/2"	102 mm	167 mm	TP34521050012	459.96	413.96
12.7 mm	-	13 mm	102 mm	167 mm	TP348668270	459.96	413.96
12.75 mm	-	13 mm	103 mm	167 mm	TP348668275	459.96	413.96
12.8 mm	-	13 mm	103 mm	167 mm	TP348668280	459.96	413.96
12.8 mm	-	14 mm	103 mm	167 mm	TP348683280	459.96	413.96
12.9 mm	-	13 mm	104 mm	167 mm	TP348668290	459.96	413.96
12.9 mm	-	14 mm	104 mm	167 mm	TP348683290	459.96	413.96
13 mm	-	13 mm	104 mm	167 mm	TP348668300	459.96	413.96
13 mm	-	14 mm	104 mm	167 mm	TP348683300	459.96	413.96
13.1 mm	-	14 mm	105 mm	176 mm	TP348668310	459.96	413.96
13.2 mm	-	14 mm	106 mm	176 mm	TP348668320	459.96	413.96
13.25 mm	-	14 mm	106 mm	176 mm	TP348668325	459.96	413.96
13.3 mm	-	14 mm	107 mm	176 mm	TP348668330	459.96	413.96
13.4 mm	-	14 mm	108 mm	176 mm	TP348668340	459.96	413.96
17/32"	0.5313"	5/8"	108 mm	176 mm	TP34521053112	459.96	413.96
13.5 mm	-	14 mm	108 mm	176 mm	TP348668350	475.01	427.50
13.6 mm	-	14 mm	109 mm	176 mm	TP348668360	475.01	427.50
13.7 mm	-	14 mm	110 mm	176 mm	TP348668370	475.01	427.50
13.8 mm	-	14 mm	111 mm	176 mm	TP348668380	475.01	427.50
13.9 mm	-	14 mm	112 mm	176 mm	TP348668390	475.01	427.50
14 mm	-	14 mm	112 mm	176 mm	TP348668400	488.29	439.46
14.1 mm	-	16 mm	113 mm	185 mm	TP34521055512	504.03	453.62
14.1 mm	-	15 mm	113 mm	185 mm	TP348668410	504.03	453.62
14.2 mm	-	16 mm	114 mm	185 mm	TP34521055912	504.03	453.62
14.2 mm	-	15 mm	114 mm	185 mm	TP348668420	504.03	453.62
9/16"	0.5625"	5/8"	115 mm	185 mm	TP34521056212	504.03	453.62
14.3 mm	-	16 mm	115 mm	185 mm	TP34521056312	504.03	453.62
14.3 mm	-	15 mm	115 mm	185 mm	TP348668430	504.03	453.62
14.4 mm	-	16 mm	116 mm	185 mm	TP34521056612	504.03	453.62
14.4 mm	-	15 mm	116 mm	185 mm	TP348668440	504.03	453.62
14.5 mm	-	15 mm	116 mm	185 mm	TP348668450	504.03	453.62
14.5 mm	-	16 mm	116 mm	185 mm	TP348683450	504.03	453.62
14.6 mm	-	16 mm	117 mm	185 mm	TP34521057412	518.76	466.88
14.6 mm	-	15 mm	117 mm	185 mm	TP348668460	518.76	466.88
14.7 mm	-	16 mm	118 mm	185 mm	TP34521057812	518.76	466.88
14.7 mm	-	15 mm	118 mm	185 mm	TP348668470	518.76	466.88
14.8 mm	-	16 mm	119 mm	185 mm	TP34521058212	518.76	466.88
14.8 mm	-	15 mm	119 mm	185 mm	TP348668480	518.76	466.88
14.9 mm	-	16 mm	120 mm	185 mm	TP34521058612	518.76	466.88
14.9 mm	-	15 mm	120 mm	185 mm	TP348668490	518.76	466.88
15 mm	-	15 mm	120 mm	185 mm	TP348668500	518.76	466.88
15 mm	-	16 mm	120 mm	185 mm	TP348683500	518.76	466.88
15.1 mm	-	16 mm	121 mm	193 mm	TP348668510	537.15	483.43
15.2 mm	-	16 mm	122 mm	193 mm	TP348668520	537.15	483.43
15.25 mm	-	16 mm	122 mm	193 mm	TP348668525	537.15	483.43
15.3 mm	-	16 mm	123 mm	193 mm	TP348668530	537.15	483.43
15.4 mm	-	16 mm	124 mm	193 mm	TP348668540	537.15	483.43
15.5 mm	-	16 mm	124 mm	193 mm	TP348668550	537.15	483.43
15.6 mm	-	16 mm	125 mm	193 mm	TP348668560	555.49	499.94
15.7 mm	-	16 mm	126 mm	193 mm	TP348668570	555.49	499.94
15.8 mm	-	16 mm	127 mm	193 mm	TP348668580	555.49	499.94
5/8"	0.625"	5/8"	128 mm	193 mm	TP34521062512	555.49	499.94
15.9 mm	-	16 mm	128 mm	193 mm	TP348668590	555.49	499.94
16 mm	-	16 mm	128 mm	193 mm	TP348668600	555.49	499.94
16.1 mm	-	18 mm	113 mm	184 mm	TP34521063312	615.83	554.24
16.5 mm	-	17 mm	116 mm	184 mm	TP348668650	615.83	554.24
16.5 mm	-	18 mm	116 mm	184 mm	TP348683650	615.83	554.24
21/32"	0.6563"	3/4"	117 mm	184 mm	TP34521065612	648.87	583.98
17 mm	-	17 mm	119 mm	184 mm	TP348668700	673.29	605.96


5xD Multi-DRILL™


A single tool geometry for steel, stainless steel, cast iron, aluminum, and more.

- Advanced sub-micro grain carbide substrate
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Drill Bit Size / Cutting Diameter (DC)	Decimal Equivalent	Connection Diameter Machine Side (DCONMS)	Usable Length (LU)	Overall Length (OAL)	Order No.	Reg-ular Price	SALE
3 mm	-	6 mm	28 mm	66 mm	ER45A2197440300	124.52	118.30
3.1 mm	-	6 mm	28 mm	66 mm	ER45A2197440310	124.52	118.30
3.15 mm	-	6 mm	28 mm	66 mm	ER45A2197440315	124.52	118.30
1/8"	0.125"	6 mm	28 mm	66 mm	ER45A2197440318	124.52	118.30
3.2 mm	-	6 mm	28 mm	66 mm	ER45A2197440320	124.52	118.30
3.22 mm	-	6 mm	28 mm	66 mm	ER45A2197440322	124.52	118.30
3.25 mm	-	6 mm	28 mm	66 mm	ER45A2197440325	124.52	118.30
3.3 mm	-	6 mm	28 mm	66 mm	ER45A2197440330	124.52	118.30
3.35 mm	-	6 mm	28 mm	66 mm	ER45A2197440335	124.52	118.30
3.38 mm	-	6 mm	28 mm	66 mm	ER45A2197440338	124.52	118.30
3.4 mm	-	6 mm	28 mm	66 mm	ER45A2197440340	124.52	118.30
3.5 mm	-	6 mm	28 mm	66 mm	ER45A2197440350	124.52	118.30
1/2" 9/64"	0.1406"	6 mm	28 mm	66 mm	ER45A2197440357	124.52	118.30
3.6 mm	-	6 mm	28 mm	66 mm	ER45A2197440360	124.52	118.30
3.65 mm	-	6 mm	28 mm	66 mm	ER45A2197440365	124.52	118.30
3.7 mm	-	6 mm	28 mm	66 mm	ER45A2197440370	124.52	118.30
#25	-	6 mm	36 mm	74 mm	ER45A2197440380	124.52	118.30
3.85 mm	-	6 mm	36 mm	74 mm	ER45A2197440385	124.52	118.30
3.88 mm	-	6 mm	36 mm	74 mm	ER45A2197440388	124.52	118.30
3.9 mm	-	6 mm	36 mm	74 mm	ER45A2197440390	124.52	118.30
5/32"	0.1563"	6 mm	36 mm	74 mm	ER45A2197440397	124.52	118.30
4 mm	-	6 mm	36 mm	74 mm	ER45A2197440400	124.52	118.30
#21	-	6 mm	36 mm	74 mm	ER45A2197440404	124.52	118.30
4.1 mm	-	6 mm	36 mm	74 mm	ER45A2197440410	124.52	118.30
4.15 mm	-	6 mm	36 mm	74 mm	ER45A2197440415	124.52	118.30
4.2 mm	-	6 mm	36 mm	74 mm	ER45A2197440420	124.52	118.30
#18	-	6 mm	36 mm	74 mm	ER45A2197440430	124.52	118.30
4.35 mm	-	6 mm	36 mm	74 mm	ER45A2197440435	124.52	118.30
11/64"	0.1719"	6 mm	36 mm	74 mm	ER45A2197440437	124.52	118.30
4.4 mm	-	6 mm	36 mm	74 mm	ER45A2197440440	124.52	118.30
4.45 mm	-	6 mm	36 mm	74 mm	ER45A2197440445	124.52	118.30
4.5 mm	-	6 mm	36 mm	74 mm	ER45A2197440450	124.52	118.30
4.6 mm	-	6 mm	36 mm	74 mm	ER45A2197440460	124.52	118.30
4.65 mm	-	6 mm	36 mm	74 mm	ER45A2197440465	124.52	118.30
#13	-	6 mm	36 mm	74 mm	ER45A2197440470	124.52	118.30
3/16"	0.1875"	6 mm	44 mm	82 mm	ER45A2197440476	124.52	118.30
4.8 mm	-	6 mm	44 mm	82 mm	ER45A2197440480	124.52	118.30
4.9 mm	-	6 mm	44 mm	82 mm	ER45A2197440490	124.52	118.30
5 mm	-	6 mm	44 mm	82 mm	ER45A2197440500	124.52	118.30
5.1 mm	-	6 mm	44 mm	82 mm	ER45A2197440510	124.52	118.30
#7	-	6 mm	44 mm	82 mm	ER45A2197440511	124.52	118.30
13/64"	0.2031"	6 mm	44 mm	82 mm	ER45A2197440516	124.52	118.30
5.2 mm	-	6 mm	44 mm	82 mm	ER45A2197440520	124.52	118.30
5.3 mm	-	6 mm	44 mm	82 mm	ER45A2197440530	124.52	118.30
5.4 mm	-	6 mm	44 mm	82 mm	ER45A2197440540	124.52	118.30
#3	-	6 mm	44 mm	82 mm	ER45A2197440541	116.16	110.34
5.5 mm	-	6 mm	44 mm	82 mm	ER45A2197440550	124.52	118.30
7/32"	0.2188"	6 mm	44 mm	82 mm	ER45A2197440556	124.52	118.30
5.6 mm	-	6 mm	44 mm	82 mm	ER45A2197440560	124.52	118.30
5.7 mm	-	6 mm	44 mm	82 mm	ER45A2197440570	124.52	118.30
5.75 mm	-	6 mm	44 mm	82 mm	ER45A2197440575	124.52	118.30
5.8 mm	-	6 mm	44 mm	82 mm	ER45A2197440580	124.52	118.30
5.9 mm	-	6 mm	44 mm	82 mm	ER45A2197440590	124.52	118.30
15/64"	0.2344"	6 mm	44 mm	82 mm	ER45A2197440595	124.52	118.30
6 mm	-	6 mm	44 mm	82 mm	ER45A2197440600	124.52	118.30
6.1 mm	-	8 mm	53 mm	91 mm	ER45A2197440610	139.86	132.84
6.2 mm	-	8 mm	53 mm	91 mm	ER45A2197440620	139.86	132.84

Drill Bit Size / Cutting Diameter (DC)	Decimal Equivalent	Connection Diameter Machine Side (DCONMS)	Usable Length (LU)	Overall Length (OAL)	Order No.	Reg-ular Price	SALE
6.3 mm	-	8 mm	53 mm	91 mm	ER45A2197440630	139.86	132.84
1/4"	0.25"	8 mm	53 mm	91 mm	ER45A2197440635	139.86	132.84
6.4 mm	-	8 mm	53 mm	91 mm	ER45A2197440640	139.86	132.84
6.5 mm	-	8 mm	53 mm	91 mm	ER45A2197440650	139.86	132.84
F	-	8 mm	53 mm	91 mm	ER45A2197440653	139.86	132.84
6.6 mm	-	8 mm	53 mm	91 mm	ER45A2197440660	139.86	132.84
6.7 mm	-	8 mm	53 mm	91 mm	ER45A2197440670	139.86	132.84
17/64"	0.2656"	8 mm	53 mm	91 mm	ER45A2197440675	139.86	132.84
6.8 mm	-	8 mm	53 mm	91 mm	ER45A2197440680	139.86	132.84
6.9 mm	-	8 mm	53 mm	91 mm	ER45A2197440690	139.86	132.84
7 mm	-	8 mm	53 mm	91 mm	ER45A2197440700	139.86	132.84
71 mm	-	8 mm	53 mm	91 mm	ER45A2197440710	139.86	132.84
1/2" 9/32" K	0.2813"	8 mm	53 mm	91 mm	ER45A2197440715	139.86	132.84
7.2 mm	-	8 mm	53 mm	91 mm	ER45A2197440720	139.86	132.84
7.25 mm	-	8 mm	53 mm	91 mm	ER45A2197440725	139.86	132.84
7.3 mm	-	8 mm	53 mm	91 mm	ER45A2197440730	139.86	132.84
7.4 mm	-	8 mm	53 mm	91 mm	ER45A2197440740	139.86	132.84
7.45 mm	-	8 mm	53 mm	91 mm	ER45A2197440745	130.47	132.91
7.5 mm	-	8 mm	53 mm	91 mm	ER45A2197440750	139.86	132.84
19/64"	0.2969"	8 mm	53 mm	91 mm	ER45A2197440754	139.86	132.84
7.6 mm	-	8 mm	53 mm	91 mm	ER45A2197440760	139.86	132.84
7.7 mm	-	8 mm	53 mm	91 mm	ER45A2197440770	139.86	132.84
7.8 mm	-	8 mm	53 mm	91 mm	ER45A2197440780	139.86	132.84
7.9 mm	-	8 mm	53 mm	91 mm	ER45A2197440790	139.86	132.84
5/16"	0.3125"	8 mm	53 mm	91 mm	ER45A2197440794	139.86	132.84
8 mm	-	8 mm	53 mm	91 mm	ER45A2197440800	139.86	132.84
8.1 mm	-	10 mm	61 mm	103 mm	ER45A2197440810	169.02	160.58
8.2 mm	-	10 mm	61 mm	103 mm	ER45A2197440820	169.02	160.58
8.3 mm	-	10 mm	61 mm	103 mm	ER45A2197440830	169.02	160.58
21/64"	0.3281"	10 mm	61 mm	103 mm	ER45A2197440833	169.02	160.58
8.4 mm	-	10 mm	61 mm	103 mm	ER45A2197440840	169.02	160.58
8.45 mm	-	10 mm	61 mm	103 mm	ER45A2197440845	169.02	160.58
8.5 mm	-	10 mm	61 mm	103 mm	ER45A2197440850	169.02	160.58
8.6 mm	-	10 mm	61 mm	103 mm	ER45A2197440860	169.02	160.58
8.7 mm	-	10 mm	61 mm	103 mm	ER45A2197440870	169.02	160.58
11/32"	0.3438"	10 mm	61 mm	103 mm	ER45A2197440873	157.67	149.80
8.8 mm	-	10 mm	61 mm	103 mm	ER45A2197440880	169.02	160.58
8.9 mm	-	10 mm	61 mm	103 mm	ER45A2197440890	169.02	160.58
9 mm	-	10 mm	61 mm	103 mm	ER45A2197440900	169.02	160.58
9.05 mm	-	10 mm	61 mm	103 mm	ER45A2197440905	169.02	160.58
9.1 mm	-	10 mm	61 mm	103 mm	ER45A2197440910	169.02	160.58
23/64"	0.3594"	10 mm	61 mm	103 mm	ER45A2197440913	169.02	160.58
9.2 mm	-	10 mm	61 mm	103 mm	ER45A2197440920	169.02	160.58
9.3 mm	-	10 mm	61 mm	103 mm	ER45A2197440930	169.02	160.58
9.35 mm	-	10 mm	61 mm	103 mm	ER45A2197440935	169.02	160.58
9.4 mm	-	10 mm	61 mm	103 mm	ER45A2197440940	169.02	160.58
9.45 mm	-	10 mm	61 mm	103 mm	ER45A2197440945	169.02	160.58
9.5 mm	-	10 mm	61 mm	103 mm	ER45A2197440950	169.02	160.58
3/8"	0.375"	10 mm	61 mm	103 mm	ER45A2197440953	169.02	160.58
9.6 mm	-	10 mm	61 mm	103 mm	ER45A2197440960	169.02	160.58
9.7 mm	-	10 mm	61 mm	103 mm	ER45A2197440970	169.02	160.58
9.8 mm	-	10 mm	61 mm	103 mm	ER45A2197440980	169.02	160.58
9.9 mm	-	10 mm	61 mm	103 mm	ER45A2197440990	169.02	160.58
25/64"	0.3906"	10 mm	61 mm	103 mm	ER45A2197440992	169.02	160.58
10 mm	-	10 mm	61 mm	103 mm	ER45A2197441000	169.02	160.58
10.1 mm	-	12 mm	71 mm	118 mm	ER45A2197441010	227.88	216.49
10.2 mm	-	12 mm	71 mm	118 mm	ER45A2197441020	227.88	216.49
10.25 mm	-	12 mm	71 mm	118 mm	ER45A2197441025	227.88	216.49
10.3 mm	-	12 mm	71 mm	118 mm	ER45A2197441030	227.88	216.49
13/32"	0.4063"	12 mm	71 mm	118 mm	ER45A2197441032	227.88	216.49
10.35 mm	-	12 mm	71 mm	118 mm	ER45A2197441035	227.88	216.49
10.4 mm	-	12 mm	71 mm	118 mm	ER45A2197441040	227.88	216.49
10.5 mm	-	12 mm	71 mm	118 mm	ER45A2197441050	227.88	216.49
10.55 mm	-	12 mm	71 mm	118 mm	ER45A2197441055	227.88	216.49
10.6 mm	-	12 mm	71 mm	118 mm	ER45A2197441060	227.88	216.49
10.7 mm	-	12 mm	71 mm	118 mm	ER45A2197441070	227.88	216.49
27/64"	0.4219"	12 mm	71 mm	118 mm	ER45A2197441072	227.88	216.49
10.8 mm	-	12 mm	71 mm	118 mm	ER45A2197441080	227.88	216.49
10.9 mm	-	12 mm	71 mm	118 mm	ER45A2197441090	227.88	216.49
11 mm	-	12 mm	71 mm	118 mm	ER45A2197441100	227.88	216.49
11.1 mm	-	12 mm	71 mm	118 mm	ER45A2197441110	227.88	216.49
7/16"	0.4375"	12 mm	71 mm	118 mm	ER45A2197441111	227.88	216.49
11.2 mm	-	12 mm	71 mm	118 mm	ER45A2197441120	227.88	216.49



Drill Bit Size / Cutting Diameter (DC)	Decimal Equivalent	Connection Diameter Machine Side (DCONMS)	Usable Length (LU)	Overall Length (OAL)	Order No.	Regular Price	SALE
11.25 mm	-	12 mm	71 mm	118 mm	ER45A2197441125	227.88	216.49
11.3 mm	-	12 mm	71 mm	118 mm	ER45A2197441130	227.88	216.49
11.35 mm	-	12 mm	71 mm	118 mm	ER45A2197441135	227.88	216.49
11.4 mm	-	12 mm	71 mm	118 mm	ER45A2197441140	227.88	216.49
11.45 mm	-	12 mm	71 mm	118 mm	ER45A2197441145	227.88	216.49
11.5 mm	-	12 mm	71 mm	118 mm	ER45A2197441150	227.88	216.49
29/64"	0.4531"	12 mm	71 mm	118 mm	ER45A2197441151	227.88	216.49
11.6 mm	-	12 mm	71 mm	118 mm	ER45A2197441160	227.88	216.49
11.7 mm	-	12 mm	71 mm	118 mm	ER45A2197441170	227.88	216.49
11.8 mm	-	12 mm	71 mm	118 mm	ER45A2197441180	227.88	216.49
11.9 mm	-	12 mm	71 mm	118 mm	ER45A2197441190	227.88	216.49
15/32"	0.4688"	12 mm	71 mm	118 mm	ER45A2197441191	227.88	216.49
12 mm	-	12 mm	71 mm	118 mm	ER45A2197441200	331.73	315.16
12.15 mm	-	14 mm	77 mm	124 mm	ER45A2197441215	331.73	315.16
12.2 mm	-	14 mm	71 mm	118 mm	ER45A2197441220	331.73	315.16
12.3 mm	-	14 mm	77 mm	124 mm	ER45A2197441230	331.73	315.16
12.5 mm	-	14 mm	77 mm	124 mm	ER45A2197441250	331.73	315.16
12.55 mm	-	14 mm	77 mm	124 mm	ER45A2197441255	331.73	315.16
12.6 mm	-	14 mm	77 mm	124 mm	ER45A2197441260	331.73	315.16
1/2"	0.5"	14 mm	77 mm	124 mm	ER45A2197441270	331.73	315.16
12.8 mm	-	14 mm	77 mm	124 mm	ER45A2197441280	331.73	315.16
13 mm	-	14 mm	77 mm	124 mm	ER45A2197441300	331.73	315.16
13.1 mm	-	14 mm	77 mm	124 mm	ER45A2197441310	331.73	315.16
13.3 mm	-	14 mm	77 mm	124 mm	ER45A2197441330	331.73	315.16
13.35 mm	-	14 mm	77 mm	124 mm	ER45A2197441335	331.73	315.16
13.45 mm	-	14 mm	77 mm	124 mm	ER45A2197441345	331.73	315.16
17/32"	0.5313"	14 mm	77 mm	124 mm	ER45A2197441349	331.73	315.16
13.5 mm	-	14 mm	77 mm	124 mm	ER45A2197441350	331.73	315.16
13.6 mm	-	14 mm	77 mm	124 mm	ER45A2197441360	331.73	315.16
13.65 mm	-	14 mm	77 mm	124 mm	ER45A2197441365	331.73	315.16
13.7 mm	-	14 mm	77 mm	124 mm	ER45A2197441370	331.73	315.16
13.8 mm	-	14 mm	77 mm	124 mm	ER45A2197441380	331.73	315.16
35/64"	0.5469"	14 mm	77 mm	124 mm	ER45A2197441389	331.73	315.16
14 mm	-	14 mm	77 mm	124 mm	ER45A2197441400	331.73	315.16
14.1 mm	-	16 mm	77 mm	124 mm	ER45A2197441410	404.94	384.72
9/16"	0.5625"	16 mm	83 mm	133 mm	ER45A2197441429	404.94	384.72
14.5 mm	-	16 mm	83 mm	133 mm	ER45A2197441450	404.94	384.72
14.6 mm	-	16 mm	83 mm	133 mm	ER45A2197441460	404.94	384.72
37/64"	0.5781"	16 mm	83 mm	133 mm	ER45A2197441468	404.94	384.72
14.8 mm	-	16 mm	83 mm	133 mm	ER45A2197441480	404.94	384.72
15 mm	-	16 mm	83 mm	133 mm	ER45A2197441500	404.94	384.72
19/32"	0.5938"	16 mm	83 mm	133 mm	ER45A2197441508	404.94	384.72
15.1 mm	-	16 mm	83 mm	133 mm	ER45A2197441510	404.94	384.72
15.35 mm	-	16 mm	83 mm	133 mm	ER45A2197441535	404.94	384.72
15.5 mm	-	16 mm	83 mm	133 mm	ER45A2197441550	404.94	384.72
15.6 mm	-	16 mm	83 mm	133 mm	ER45A2197441560	404.94	384.72
5/8"	0.625"	16 mm	83 mm	133 mm	ER45A2197441588	404.94	384.72
16 mm	-	16 mm	83 mm	133 mm	ER45A2197441600	556.95	529.11
41/64"	0.6406"	18 mm	93 mm	143 mm	ER45A2197441627	556.95	529.11
16.5 mm	-	18 mm	93 mm	143 mm	ER45A2197441650	556.95	529.11
21/32"	0.6563"	18 mm	93 mm	143 mm	ER45A2197441667	556.95	529.11
17 mm	-	18 mm	93 mm	143 mm	ER45A2197441700	556.95	529.11
11/16"	0.6875"	18 mm	93 mm	143 mm	ER45A2197441746	556.95	529.11
17.5 mm	-	18 mm	93 mm	143 mm	ER45A2197441750	556.95	529.11
18 mm	-	18 mm	93 mm	143 mm	ER45A2197441800	556.95	529.11
3/4"	0.75"	20 mm	101 mm	153 mm	ER45A2197441905	556.95	529.11

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MARXBORE Mechanics Drills

List 383 - Black & Gold - 135° Point - 3/8" Reduced Shank



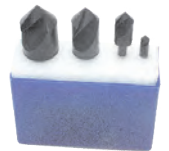
Tool Diameter	Decimal Equivalent	Flute Length	Overall Length (OAL)	Shank Standard	Order No.	Regular Price	SALE
1/16"	0.0625"	1"	2"	1/16"	MX1082115	2.63	2.28
5/64"	0.0781"	1-1/8"	2-1/8"	5/64"	MX1082116	2.73	2.43
3/32"	0.0938"	1-1/4"	2-1/4"	3/64"	MX1082117	2.77	2.43
7/64"	0.1094"	1-3/8"	2-3/8"	7/64"	MX1082118	2.97	2.57
1/8"	0.1250"	1-1/2"	2-1/2"	1/8"	MX1082119	3.02	2.59
9/64"	0.1406"	1-5/8"	2-5/8"	9/64"	MX1082120	3.25	2.88
5/32"	0.1562"	1-3/4"	2-3/4"	5/32"	MX1082121	3.49	3.05
11/64"	0.1719"	1-7/8"	2-7/8"	11/64"	MX1082122	3.85	3.34
3/16"	0.1875"	2"	3"	3/16"	MX1082123	4.10	3.50
13/64"	0.2031"	2-1/8"	3-1/8"	13/64"	MX1082124	4.48	3.96
7/32"	0.2188"	2-1/4"	3-1/4"	7/32"	MX1082125	4.62	3.96
15/64"	0.2344"	2-3/8"	3-3/8"	15/64"	MX1082126	5.04	4.41
1/4"	0.2500"	2"	3-1/2"	1/4"	MX1082127	5.56	4.87
17/64"	0.2656"	2-1/8"	3-5/8"	17/64"	MX1082128	6.16	5.32
9/32"	0.2812"	2-1/4"	3-3/4"	9/32"	MX1082129	6.72	5.78
19/64"	0.2969"	2-3/8"	3-7/8"	19/64"	MX1082130	7.66	6.70
5/16"	0.3125"	2-1/2"	4"	5/16"	MX1082131	7.87	6.84
21/64"	0.3281"	2-9/16"	4-1/16"	21/64"	MX1082132	8.57	7.44
11/32"	0.3438"	2-5/8"	4-1/8"	11/32"	MX1082133	8.99	7.75
23/64"	0.3594"	2-11/16"	4-3/16"	23/64"	MX1082134	9.80	8.52
3/8"	0.3750"	2-5/8"	4-1/4"	3/8"	MX1082135	10.53	9.12
25/64"	0.3906"	2-11/16"	4-5/16"	3/8"	MX1082136	11.72	10.19
13/32"	0.4062"	2-3/4"	4-3/8"	3/8"	MX1082137	12.53	10.96
27/64"	0.4219"	2-13/16"	4-7/16"	3/8"	MX1082138	14.84	12.93
7/16"	0.4375"	2-7/8"	4-1/2"	3/8"	MX1082139	16.28	14.15
29/64"	0.4531"	3"	4-5/8"	3/8"	MX1082140	17.84	15.52
15/32"	0.4688"	3-1/8"	4-3/4"	3/8"	MX1082141	19.15	16.59
31/64"	0.4844"	3-1/4"	4-7/8"	3/8"	MX1082142	19.98	17.34
1/2"	0.5000"	3"	5"	3/8"	MX1082143	20.71	17.96

29156



Uniflute® Countersink Sets High Speed Steel

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



Quantity - 4			
Point Angle (SIG)	Order No.	Regular Price	SALE
60 Degrees	BC7064001	165.77	140.91
82 Degrees	BC7064006	165.77	140.91
90 Degrees	BC7064011	165.77	140.91
100 Degrees	BC7064016	165.77	140.91
120 Degrees	BC7064021	165.77	140.91

Quantity - 7			
Point Angle (SIG)	Order No.	Regular Price	SALE
60 Degrees	BC7064003	235.51	200.17
82 Degrees	BC7064008	235.51	200.17
90 Degrees	BC7064013	235.51	200.17
100 Degrees	BC7064018	235.51	200.17
120 Degrees	BC7064023	235.51	200.17

9955



6 Flute Chatterless Countersink Sets High Speed Steel • In Plastic Case

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

60 Degrees				90 Degrees				82 Degrees				100 Degrees				90 Degrees, TiN				60 Degrees, TiN				82 Degrees, TiN			
Quantity	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
4	BC7579003	174.65	148.45	BC7579013	174.65	148.45	BC7579008	174.65	148.45	BC7579019	174.65	148.45	BC7579384	240.25	204.27	BC7579380	240.25	204.27	BC7579382	240.25	204.27	BC7579380	240.25	204.27	BC7579382	240.25	204.27
7	BC7579001	254.16	216.03	BC7579011	254.16	216.03	BC7579006	254.16	216.03	BC7579016	254.16	216.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



9905

CUTTING TOOLS

KEC Solid Carbide NC Spotting Drills

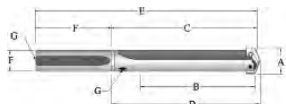
82°, 90° and 120°

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

Drill Bit Size / Cutting Diameter (DC)	Flute Length	Overall Length (OAL)	120 Degrees		90 Degrees		82 Degrees	
			Order No.	Reg-ular Price	Order No.	Reg-ular Price	Order No.	Reg-ular Price
1/8"	3/8"	1-1/2"	AV4134181	30.79	AV4134180	30.79	AV4234182	29.40
3/16"	9/16"	2"	AV4134188	40.46	AV4134187	40.46	AV4234185	38.63
1/4"	3/4"	2-1/2"	AV4134141	51.62	AV4134140	51.62	AV4234145	49.31
5/16"	3/4"	2-1/2"	AV4134313	62.27	AV4134312	62.27	AV4234315	59.49
3/8"	3/4"	2-1/2"	AV4134381	71.26	AV4134380	71.26	AV4234385	68.08
1/2"	1"	3"	AV4134121	111.44	AV4134120	111.44	AV4234125	106.44
5/8"	1"	3-1/2"	AV4134581	205.23	AV4134580	205.23	-	-
3/4"	1-1/8"	4"	AV4134341	342.52	AV4134340	342.52	AV4234345	327.15

9888

ALLIED MACHINE & ENGINEERING CORP. Allied T-A® Drill Insert Straight Shank Holders Straight Flute Coolant Fed



Cutting Diameter (DC)	Usable Length (LU)	Protruding Length (LPR)	Connection Diameter Machine Side (DCONMS)	Shank Length (LS)	Order No.	Regular Price	SALE
-	1-3/8"	2-3/16"	3/4"	2-3/8"	BA5522000S075L	327.60	320.61
-	2-5/8"	3-7/8"	3/4"	3"	BA5522010S075L	341.60	334.26
-	2-5/8"	3-7/8"	1"	3"	BA5522010S100L	341.60	334.26
-	3-3/8"	4-1/2"	1"	3-1/2"	BA5522020S100L	368.20	360.34
-	3-3/8"	4-1/2"	1-1/4"	3-1/2"	BA5522020S125L	368.20	360.34
-	4-3/4"	6"	1-1/4"	4"	BA5522030S125L	420.00	410.95
-	4-3/4"	6"	1-1/2"	4"	BA5522030S150L	443.80	434.19
-	5-1/8"	6-1/2"	1-1/2"	4"	BA5522040S150L	483.00	472.66
-	5-1/8"	6-1/2"	1-3/4"	4"	BA5522040S175L	509.60	498.68
-	6-3/4"	8-1/2"	2"	4"	BA5522050S200L	765.80	749.35
-	6-3/4"	8-7/8"	3"	5"	BA5522070S300L	1,041.60	1,019.17
-	1-1/4"	2-1/32"	3/4"	2-3/8"	BA55220Y0S075L	327.60	320.61
-	1-1/4"	2-1/32"	3/4"	2-3/8"	BA55220Z0S075L	327.60	320.61
-	6-1/2"	7-3/4"	1-1/2"	4"	BA5523030S150L	456.40	446.62
-	2-1/2"	3-5/16"	3/4"	2-3/8"	BA5524000S075L	337.40	330.13
-	6-5/8"	7-7/8"	3/4"	3"	BA5524010S075L	368.20	360.34
-	6-5/8"	7-7/8"	1"	3"	BA5524010S100L	368.20	360.34
-	7-3/8"	8-1/2"	1"	3-1/2"	BA5524020S100L	397.60	389.00
-	7-3/8"	8-1/2"	1-1/4"	3-1/2"	BA5524020S125L	397.60	389.00
-	8-1/4"	9-1/2"	1-1/4"	4"	BA5524030S125L	443.80	434.19
-	8-1/4"	9-1/2"	1-1/2"	4"	BA5524030S150L	473.20	463.00
-	22"	23-1/4"	1-1/2"	4"	BA5527030S150L	793.80	776.76
-	9-1/8"	10-1/2"	1-1/2"	4"	BA5524040S150L	558.60	546.53
-	9-1/8"	10-1/2"	1-3/4"	4"	BA5524040S175L	602.00	589.02
-	24-5/8"	26"	1-1/2"	4"	BA5527040S150L	929.60	909.63
-	10-3/4"	12-1/2"	2"	4"	BA5524050S200L	841.40	823.35
-	18-1/4"	20"	2"	4"	BA5525050S200L	1,143.80	1,119.20
-	26"	27-3/4"	2"	4"	BA5527050S200L	1,342.60	1,313.77
-	10-3/4"	12-7/8"	3"	5"	BA5524070S300L	1,244.60	1,217.81
-	27"	29-1/8"	3"	5"	BA5527070S300L	2,011.80	1,968.56
-	21-7/8"	24"	3"	5"	BA5525070S300L	1,771.00	1,732.99
-	2-3/8"	3-5/32"	3/4"	2-3/8"	BA55240Y0S075L	337.40	330.13
-	2-3/8"	3-5/32"	3/4"	2-3/8"	BA55240Z0S075L	337.40	330.13
-	4-1/2"	5-5/16"	3/4"	2-3/8"	BA5525000S075L	358.40	350.67
-	10-5/8"	11-7/8"	1"	3"	BA5525010S100L	422.80	413.75
-	18"	19-1/4"	1"	3"	BA5527010S100L	511.00	500.08
-	11-3/8"	12-1/2"	1-1/4"	3-1/2"	BA5525020S125L	473.20	463.00
-	4-3/8"	5-5/32"	3/4"	2-3/8"	BA55250Y0S075L	358.40	350.67
-	4-3/8"	5-5/32"	3/4"	2-3/8"	BA55250Z0S075L	358.40	350.67
-	8-3/4"	9-17/32"	3/4"	2-3/8"	BA55270Y0S075L	413.00	404.12
-	5-3/8"	6-1/2"	1-1/4"	3-1/2"	BA5523020S125L	387.80	379.48
-	8-3/4"	9-17/32"	3/4"	2-3/8"	BA55270Z0S075L	413.00	404.12
-	4-5/8"	5-7/8"	1"	3"	BA5523010S100L	358.40	350.67
-	13-3/4"	15"	1-1/4"	4"	BA5525030S125L	614.60	601.34
-	20-1/8"	21-1/4"	1-1/4"	3-1/2"	BA5527020S125L	548.80	537.01
-	11-5/8"	12-7/16"	3/4"	2-3/8"	BA5527000S075L	460.60	450.68
-	16-5/8"	18"	1-1/2"	4"	BA5525040S150L	680.40	665.82

9673

KEC Solid Carbide 142° Point Angle Spotting Drill

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

Point Diameter (PDD)	Flute Length	Overall Length (OAL)	Order No.	Regular Price	SALE
1/8"	5/8"	1-1/2"	AV4134184	30.79	27.69
3/16"	9/16"	2"	AV4134189	40.46	36.38
1/4"	13/16"	2-1/2"	AV4134144	51.62	46.39
5/16"	3/4"	2-1/2"	AV4134314	62.27	56.09
3/8"	3/4"	2-1/2"	AV4134384	71.26	64.07
1/2"	1-1/8"	3"	AV4134124	111.44	100.33
5/8"	1"	3-1/2"	AV4134584	205.23	184.67
3/4"	1-1/8"	4"	AV4134344	342.52	308.26

9886

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

Series 2 - Blade Thickness - 3/16"

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



Grade - C2 (K20)			
Coating - TiAIN			
Cutting Diameter (DC)	Order No.	Regular Price	SALE
31/32"	BA521C22A0031	130.47	117.15
1"	BA521C22A0100	130.47	117.15
1-1/32"	BA521C22A0101	130.47	117.15
1-3/64"	BA521C22A01046	130.47	117.15
1-1/16"	BA521C22A0102	130.47	117.15
1-3/32"	BA521C22A0103	130.47	117.15
1-7/64"	BA521C22A0109	130.47	117.15
1-1/8"	BA521C22A0104	130.47	117.15
1-5/32"	BA521C22A0105	130.47	117.15
1-3/16"	BA521C22A0106	130.47	117.15
1-7/32"	BA521C22A0107	130.47	117.15
1-1/4"	BA521C22A0108	130.47	117.15
1-9/32"	BA521C22A0109	130.47	117.15
1-5/16"	BA521C22A0110	130.47	117.15
1-11/32"	BA521C22A0111	130.47	117.15
1-3/8"	BA521C22A0112	130.47	117.15

Grade - C5 (P40)			
Coating - TiAIN			
Cutting Diameter (DC)	Order No.	Regular Price	SALE
31/32"	BA521C52A0031	130.47	117.15
1"	BA521C52A0100	130.47	117.15
1-1/32"	BA521C52A0101	130.47	117.15
1-3/64"	BA521C52A01046	130.47	117.15
1-1/16"	BA521C52A0102	130.47	117.15
1-3/32"	BA521C52A0103	130.47	117.15
1-7/64"	BA521C52A0109	130.47	117.15
1-1/8"	BA521C52A0104	130.47	117.15
1-5/32"	BA521C52A0105	130.47	117.15
1-3/16"	BA521C52A0106	130.47	117.15
1-7/32"	BA521C52A0107	130.47	117.15
1-1/4"	BA521C52A0108	130.47	117.15
1-9/32"	BA521C52A0109	130.47	117.15
1-5/16"	BA521C52A0110	130.47	117.15
1-11/32"	BA521C52A0111	130.47	117.15
1-3/8"	BA521C52A0112	130.47	117.15
25 mm	BA521C52A25	130.47	117.15
26 mm	BA521C52A26	130.47	117.15
27 mm	BA521C52A27	130.47	117.15
28 mm	BA521C52A28	130.47	117.15
29 mm	BA521C52A29	130.47	117.15
30 mm	BA521C52A30	130.47	117.15
31 mm	BA521C52A31	130.47	117.15
32 mm	BA521C52A32	130.47	117.15
33 mm	BA521C52A33	130.47	117.15
34 mm	BA521C52A34	130.47	117.15
35 mm	BA521C52A35	130.47	117.15

9659



HSS, General Purpose, 4-Flute, Center Cutting, Square, Single End, TiCN Coated End Mills

• Style #HG-4C-TC

Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	Depth of Cut Maximum (APMX)	Flute Count (NOF)	Order No.	Regular Price	SALE
1/8"	3/8"	2-5/16"	3/8"	4	CE60C33240	76.86	53.80
5/32"	3/8"	2-3/8"	1/2"	4	CE60C33242	77.73	54.37
3/16"	3/8"	2-3/8"	1/2"	4	CE60C33244	70.04	49.00
3/16"	3/8"	3-1/16"	1-1/4"	4	CE60C33406	76.72	53.70
3/16"	3/8"	3-9/16"	1-3/4"	4	CE60C33457	85.04	59.57
7/32"	3/8"	2-7/16"	5/8"	4	CE60C33246	70.99	49.68
1/4"	3/8"	2-7/16"	5/8"	4	CE60C33248	70.99	49.68
1/4"	3/8"	3-1/16"	1-1/4"	4	CE60C33408	90.94	63.60
17/64"	3/8"	2-1/2"	3/4"	4	CE60C33249	76.97	53.84
5/16"	3/8"	2-1/2"	3/4"	4	CE60C33252	72.13	50.52
5/16"	3/8"	3-1/8"	1-3/8"	4	CE60C33410	97.54	68.30
11/32"	3/8"	3-1/4"	1-1/2"	4	CE60C33411	89.29	62.51
3/8"	3/8"	4-1/4"	2-1/2"	4	CE60C33463	118.87	83.23
13/32"	3/8"	2-11/16"	1"	4	CE60C33258	100.93	70.65
7/16"	3/8"	2-11/16"	1"	4	CE60C33260	109.31	76.53
7/16"	1/2"	3-3/4"	1-3/4"	4	CE60C33414	113.50	79.38
15/32"	1/2"	3-1/4"	1-1/4"	4	CE60C33262	111.64	78.20
1/2"	3/8"	2-11/16"	1"	4	CE60C33264	101.02	70.64
1/2"	1/2"	3-1/4"	1-1/4"	4	CE60C33265	98.14	68.64
1/2"	1/2"	4"	2"	4	CE60C33416	128.20	89.79
17/32"	1/2"	3-3/8"	1-3/8"	4	CE60C33266	179.21	125.44
9/16"	1/2"	3-3/8"	1-3/8"	4	CE60C33267	196.45	137.45
5/8"	1/2"	3-3/8"	1-3/8"	4	CE60C33269	177.30	124.11
5/8"	5/8"	3-3/4"	1-5/8"	4	CE60C33270	173.99	121.82
21/32"	5/8"	3-3/4"	1-5/8"	4	CE60C33271	202.45	141.65
11/16"	5/8"	3-3/4"	1-5/8"	4	CE60C33273	202.45	141.65
3/4"	1/2"	3-5/8"	1-5/8"	4	CE60C33275	213.61	149.53
3/4"	3/4"	3-7/8"	1-5/8"	4	CE60C33277	207.34	145.16
3/4"	3/4"	5-1/4"	3"	4	CE60C33418	268.11	187.62
3/4"	3/4"	6-1/4"	4"	4	CE60C33469	331.34	231.93
7/8"	7/8"	4-1/8"	1-7/8"	4	CE60C33283	266.01	186.28
1"	3/4"	4-1/8"	1-7/8"	4	CE60C33288	311.04	217.65
1"	1"	4-1/2"	2"	4	CE60C33290	311.04	217.65

29532



Solid Carbide, High Performance, 5-Flute, Variable Index, Center Cutting, Square, Single End, AP/Max Coated, End Mills for Ferrous Materials

• Style #CEM-V2-5R-TA



Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	Depth of Cut Maximum (APMX)	Flute Count (NOF)	Order No.	Regular Price	SALE
3/16"	3/16"	2"	3/8"	5	CE60C80525	54.63	38.20
3/16"	3/16"	2"	7/16"	5	CE60C80527	76.99	53.91
3/16"	3/16"	2-1/2"	3/4"	5	CE60C80529	80.71	56.53
1/4"	1/4"	2"	1/2"	5	CE60C80531	74.89	52.37
1/4"	1/4"	2-1/2"	3/4"	5	CE60C80533	101.77	71.17
1/4"	1/4"	3"	1-1/4"	5	CE60C80537	126.98	88.87
5/16"	5/16"	2"	1/2"	5	CE60C80538	113.62	79.49
5/16"	5/16"	2-1/2"	13/16"	5	CE60C80540	114.30	79.95
5/16"	5/16"	3"	1-1/4"	5	CE60C80542	129.02	90.27
3/8"	3/8"	2"	5/8"	5	CE60C80545	125.24	87.64
3/8"	3/8"	2-1/2"	7/8"	5	CE60C80547	131.77	92.28
3/8"	3/8"	3"	1-1/8"	5	CE60C80549	178.32	124.78
3/8"	3/8"	4"	2"	5	CE60C80551	182.90	128.01
7/16"	7/16"	2-1/2"	5/8"	5	CE60C80553	168.87	118.16
7/16"	7/16"	3"	1"	5	CE60C80555	190.18	133.08
7/16"	7/16"	4"	2"	5	CE60C80557	222.67	155.87
1/2"	1/2"	2-1/2"	5/8"	5	CE60C80558	170.81	119.53
1/2"	1/2"	3"	1"	5	CE60C80560	186.31	130.46
1/2"	1/2"	3"	1-1/4"	5	CE60C80565	211.82	148.34
1/2"	1/2"	4"	2"	5	CE60C80571	269.40	188.55
5/8"	5/8"	3"	3/4"	5	CE60C80576	320.15	224.14
5/8"	5/8"	3-1/2"	1-1/4"	5	CE60C80578	341.04	238.75
5/8"	5/8"	5"	2-1/4"	5	CE60C80583	496.55	347.66
3/4"	3/4"	3"	1"	5	CE60C80588	408.13	285.72
3/4"	3/4"	4"	1-1/2"	5	CE60C80590	495.36	346.73
3/4"	3/4"	5"	2-1/4"	5	CE60C80595	635.68	445.01
1"	1"	4"	1-1/2"	5	CE60C80600	799.64	559.77
1"	1"	5"	2-1/4"	5	CE60C80605	963.16	674.24
1"	1"	6"	3"	5	CE60C80610	1,266.59	886.64

29538



Cobalt, Heavy Duty, 4-Flute, Center Cutting, Square, Single End, Bright, End Mills

• Style #HGC-4C



Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	Depth of Cut Maximum (APMX)	Flute Count (NOF)	Order No.	Regular Price	SALE
1/4"	3/8"	3-9/16"	1-3/4"	4	CE60C32691	84.64	59.24
9/32"	3/8"	3-1/8"	1-3/8"	4	CE60C32647	70.25	49.18
5/16"	3/8"	3-1/8"	1-3/8"	4	CE60C32648	75.49	52.86
5/16"	3/8"	3-3/4"	2"	4	CE60C32693	88.93	62.23
3/8"	3/8"	3-1/4"	1-1/2"	4	CE60C42857	71.48	50.00
3/8"	3/8"	4-1/4"	2-1/2"	4	CE60C42913	92.54	64.80
7/16"	3/8"	3-3/4"	1-3/4"	4	CE60C32651	92.57	64.77
1/2"	1/2"	4"	2"	4	CE60C42861	99.62	69.73
5/8"	5/8"	3-3/4"	1-5/8"	4	CE60C42703	152.96	107.07
5/8"	5/8"	4-5/8"	2-1/2"	4	CE60C42864	230.64	161.46
3/4"	3/4"	3-7/8"	1-5/8"	4	CE60C42707	194.53	136.09
3/4"	3/4"	6-1/4"	4"	4	CE60C42924	314.22	220.01
7/8"	7/8"	5-3/4"	3-1/2"	4	CE60C32653	245.84	172.03
1"	1"	4-1/2"	2"	4	CE60C42715	263.23	184.26
1"	1"	6-1/2"	4"	4	CE60C42876	429.42	300.58
1-1/2"	1-1/4"	10-1/2"	8"	6	CE60C32699	1,306.82	914.81

29540



Cobalt, Heavy Duty, 2-Flute, Center Cutting, Square, Single End, TiN Coated, End Mills

• Style #HGC-2-TN



Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	Depth of Cut Maximum (APMX)	Flute Count (NOF)	Order No.	Regular Price	SALE
3/8"	3/8"	2-3/4"	1"	2	CE60C75138	66.32	46.42
3/8"	3/8"	3-1/4"	1-1/2"	2	CE60C75139	66.63	46.63
1/2"	1/2"	2-11/16"	3/16"	2	CE60C75140	57.96	40.60
1/2"	1/2"	3-1/2"	1-1/2"	2	CE60C75141	82.50	57.70
5/8"	5/8"	3-3/8"	1-1/8"	2	CE60C75144	111.66	78.16
3/4"	3/4"	3-5/8"	1-5/16"	2	CE60C75145	143.81	100.67
7/8"	7/8"	4"	1-1/2"	2	CE60C75167	211.40	147.99
7/8"	7/8"	4-1/8"	1-1/2"	2	CE60C75168	215.04	150.57
1"	1"	4-1/8"	1-1/2"	2	CE60C75170	242.52	169.76

29863

CUTTING TOOLS

Cobalt, Heavy Duty, 4-Flute, Center Cutting, Square, Single End, TiCN Coated End Mills

• Style #HGC-4C-TC



Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	Depth of Cut Maximum (APMX)	Flute Count (NOF)	Order No.	Regular Price	SALE
1/4"	3/8"	3-1/16"	1-1/4"	4	CE60C32673	85.30	59.73
1/4"	3/8"	3-9/16"	1-3/4"	4	CE60C32718	96.82	67.78
9/32"	3/8"	3-1/8"	1-3/8"	4	CE60C32674	80.47	56.26
5/16"	3/8"	3-1/8"	1-3/8"	4	CE60C32675	90.06	63.09
5/16"	3/8"	3-3/4"	2"	4	CE60C32720	107.90	75.53
3/8"	3/8"	3-1/4"	1-1/2"	4	CE60C32677	84.25	58.91
3/8"	3/8"	4-1/4"	2-1/2"	4	CE60C32722	108.63	76.09
7/16"	3/8"	3-3/4"	1-3/4"	4	CE60C32679	108.00	75.53
1/2"	1/2"	3-1/4"	1-1/4"	6	CE60C32634	100.23	70.15
1/2"	1/2"	3-1/4"	1-1/4"	4	CE60C32633	90.58	63.44
5/8"	5/8"	3-3/4"	1-5/8"	4	CE60C32635	178.92	125.18
5/8"	5/8"	4-5/8"	2-1/2"	4	CE60C32682	243.11	170.17
3/4"	3/4"	3-7/8"	1-5/8"	4	CE60C32637	228.79	160.11
3/4"	3/4"	6-1/4"	4"	4	CE60C32728	368.72	258.11
7/8"	7/8"	5-3/4"	3-1/2"	4	CE60C32685	292.25	204.58
1/2"	1/2"	4"	2"	4	CE60C32681	118.40	82.92
1"	1"	4-1/2"	2"	4	CE60C32639	307.71	215.40
1"	1"	6-1/2"	4"	4	CE60C32687	481.54	337.07

29531

Solid Carbide High Performance, 4-Flute, Variable Index, Center Cutting, Square, Single End, AP/Max Coated, End Mills for Ferrous Materials

• Style #CEM-V-4R-TR



Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	Depth of Cut Maximum (APMX)	Flute Count (NOF)	Order No.	Regular Price	SALE
1/8"	1/8"	1-1/2"	1/4"	4	CE60C80001	62.15	43.45
1/8"	1/8"	1-1/2"	3/8"	4	CE60C80003	61.11	42.82
1/8"	1/8"	1-1/2"	1/2"	4	CE60C80005	64.08	44.82
3/16"	3/16"	2"	3/8"	4	CE60C80007	64.62	45.29
3/16"	3/16"	2"	7/16"	4	CE60C80009	69.94	48.98
3/16"	3/16"	2-1/2"	3/4"	4	CE60C80011	85.90	60.08
1/4"	1/4"	2"	1/2"	4	CE60C80013	79.00	55.30
1/4"	1/4"	2-1/2"	3/4"	4	CE60C80015	96.81	67.77
1/4"	1/4"	3"	1-1/8"	4	CE60C80018	106.29	74.39
1/4"	1/4"	3"	1-1/4"	4	CE60C80020	116.34	81.48
5/16"	5/16"	2"	1/2"	4	CE60C80021	119.48	83.65
5/16"	5/16"	2-1/2"	13/16"	4	CE60C80023	128.79	90.10
5/16"	5/16"	3"	1-1/4"	4	CE60C80025	143.30	100.28
3/8"	3/8"	2"	5/8"	4	CE60C80027	131.40	91.96
3/8"	3/8"	2-1/2"	7/8"	4	CE60C80029	141.54	99.03
3/8"	3/8"	3"	1-1/8"	4	CE60C80031	176.54	123.55
3/8"	3/8"	4"	2"	4	CE60C80033	208.33	145.86
7/16"	7/16"	2-1/2"	5/8"	4	CE60C80035	181.38	126.92
7/16"	7/16"	3"	1"	4	CE60C80037	197.85	138.48
7/16"	7/16"	4"	2"	4	CE60C80039	218.02	152.65
1/2"	1/2"	2-1/2"	5/8"	4	CE60C80040	208.85	146.18
1/2"	1/2"	3"	1"	4	CE60C80043	220.77	154.50
1/2"	1/2"	3"	1-1/4"	4	CE60C80048	204.08	142.78
1/2"	1/2"	4"	2"	4	CE60C80054	276.08	193.31
5/8"	5/8"	3"	3/4"	4	CE60C80059	322.39	225.65
5/8"	5/8"	3-1/2"	1-1/4"	4	CE60C80061	360.51	252.30
5/8"	5/8"	5"	2-1/4"	4	CE60C80066	490.34	343.18
3/4"	3/4"	3"	1"	4	CE60C80072	483.95	338.73
3/4"	3/4"	4"	1-1/2"	4	CE60C80074	510.86	357.53
3/4"	3/4"	5"	2-1/4"	4	CE60C80079	713.90	499.70
1"	1"	4"	1-1/2"	4	CE60C80084	864.79	605.37
1"	1"	5"	2-1/4"	4	CE60C80089	1,057.45	740.15
1"	1"	6"	3"	4	CE60C80094	1,094.24	766.03

29536

Cobalt, Heavy Duty, 2-Flute, Center Cutting, Square, Single End, Bright, End Mills

• Style #HGC-2



Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	Depth of Cut Maximum (APMX)	Flute Count (NOF)	Order No.	Regular Price	SALE
3/8"	3/8"	2-3/4"	1"	2	CE60C75128	59.21	41.44
3/8"	3/8"	3-1/4"	1-1/2"	2	CE60C75129	59.49	41.60
1/2"	1/2"	2-11/16"	3/16"	2	CE60C75130	51.73	36.27
1/2"	1/2"	4"	2"	2	CE60C75132	72.13	50.52
5/8"	5/8"	3-3/8"	1-1/8"	2	CE60C75134	99.69	69.81
7/8"	7/8"	4"	1-1/2"	2	CE60C75158	188.75	132.18
1"	1"	4"	1-1/2"	2	CE60C75160	192.54	134.72
1"	1"	4-1/8"	1-1/2"	2	CE60C75161	216.55	151.55

29862

Solid Carbide High Performance Ball Nose End Mills

4-Flute • Variable Index • Center Cutting • AP/Max Coated • for Ferrous Materials • Single End

• Style #CEM-V-4B-TA



Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	Depth of Cut Maximum (APMX)	Flute Count (NOF)	Order No.	Regular Price	SALE
1/8"	1/8"	1-1/2"	3/8"	4	CE60C80108	74.49	52.13
3/16"	3/16"	2"	7/16"	4	CE60C80109	96.49	67.55
1/4"	1/4"	2-1/2"	3/4"	4	CE60C80110	117.19	82.11
5/16"	5/16"	2-1/2"	13/16"	4	CE60C80111	136.72	95.66
3/8"	3/8"	2-1/2"	7/8"	4	CE60C80112	168.03	117.68
7/16"	7/16"	3"	1"	4	CE60C80113	214.83	150.33
1/2"	1/2"	2-1/2"	5/8"	4	CE60C80114	217.17	152.02
1/2"	1/2"	3"	1"	4	CE60C80115	228.27	159.74
5/8"	5/8"	3-1/2"	1-1/4"	4	CE60C80116	367.78	257.40
3/4"	3/4"	4"	1-1/2"	4	CE60C80117	536.27	375.39
1"	1"	5"	2-1/4"	4	CE60C80118	1,006.92	704.88

29537

Solid Carbide, High Performance, 3-Flute Center Cutting, Square, Single End, ZrN Coated, End Mills for Aluminum Materials

• Style #CEM-AM3-ZN



Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	Depth of Cut Maximum (APMX)	Flute Count (NOF)	Order No.	Regular Price	SALE
1/8"	1/8"	1-1/2"	3/8"	3	CE60C72341	51.39	36.05
3/16"	3/16"	2"	5/16"	3	CE60C72342	61.46	42.98
3/16"	3/16"	2"	9/16"	3	CE60C72343	67.40	47.15
1/4"	1/4"	2-1/2"	3/4"	3	CE60C72345	86.38	60.53
5/16"	5/16"	3-1/2"	1-1/4"	3	CE60C72349	138.22	96.74
3/8"	3/8"	2"	1/2"	3	CE60C72351	96.07	67.31
3/8"	3/8"	2-1/2"	1"	3	CE60C72352	121.21	84.86
3/8"	3/8"	3-1/2"	1-1/2"	3	CE60C72353	158.42	110.92
1/2"	1/2"	2-1/2"	5/8"	3	CE60C72358	174.19	121.99
1/2"	1/2"	3"	1-1/4"	3	CE60C72359	214.48	150.19
1/2"	1/2"	4"	2"	3	CE60C72360	236.64	165.60
5/8"	5/8"	5"	2-1/2"	3	CE60C72364	483.53	338.42
3/4"	3/4"	3"	1"	3	CE60C72366	443.20	310.22
3/4"	3/4"	4"	5/8"	3	CE60C72367	521.81	365.23

29864



enDURO® M525 Solid Carbide 5 Flute Variable Index End Mills (cont.)

Square End and Corner Radius Styles

- Advanced cutting edge design for higher metal removal rates in hard to machine materials
- Unique vibration dampening geometry for maximum tool stability and longer tool life
- Specifically designed to run wet or dry on today's high speed, high -efficiency machines
- Round shank
- 40° Helix, AlCrN-X coated



Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Usable Length (LU)	Overall Length (OAL)	0.015"			0.03"			0.06"		
				Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
1/4"	1/4"	3/8"	2"	DD4065025	53.34	42.67	DD4065026	70.88	56.70	DD4065027	70.88	56.70
1/4"	1/4"	3/4"	2-1/2"	DD4065049	71.11	56.88	DD4065050	88.66	70.92	DD4065051	88.66	70.92
1/4"	1/4"	1-1/8"	3"	DD4065055	86.88	69.51	DD4065056	104.43	83.53	DD4065057	104.43	83.53
5/16"	5/16"	1"	2"	DD4065061	85.61	68.48	DD4065062	101.11	80.89	DD4065063	101.11	80.89
5/16"	5/16"	1"	2-1/2"	DD4065067	90.29	72.22	DD4065068	105.76	84.60	DD4065069	105.76	84.60
5/16"	5/16"	1"	3"	DD4065073	119.24	95.39	DD4065074	157.09	125.67	DD4065075	157.09	125.67
5/16"	5/16"	1-1/4"	4"	DD4065079	196.52	157.22	DD4065080	213.09	170.47	DD4065081	213.09	170.47
3/8"	3/8"	1/2"	2"	DD4065085	99.09	79.26	DD4065086	115.64	92.51	DD4065087	115.64	92.51
3/8"	3/8"	1"	2-1/2"	DD4065133	112.76	90.20	DD4065134	129.30	103.44	DD4065135	129.30	103.44
3/8"	3/8"	1-1/4"	3"	DD4065141	150.56	120.44	DD4065142	167.10	133.68	DD4065143	167.10	133.68
3/8"	3/8"	2"	4"	DD4065173	186.73	149.38	DD4065174	203.22	162.58	DD4065175	203.22	162.58
7/16"	7/16"	1-1/4"	2-3/4"	DD4065197	160.10	128.08	DD4065198	175.39	140.30	DD4065199	175.39	140.30
1/2"	1/2"	50 mm	2-1/2"	DD4065213	170.34	136.27	DD4065214	186.84	149.47	DD4065215	186.84	149.47
1/2"	1/2"	1-1/4"	3"	DD4065258	183.32	146.65	DD4065259	199.85	159.88	DD4065260	199.85	159.88
1/2"	1/2"	5/16"	3"	DD4065267	190.25	152.19	DD4065268	206.78	165.42	DD4065269	206.78	165.42
1/2"	1/2"	2-1/8"	4"	DD4065294	243.04	194.43	DD4065295	258.96	207.17	DD4065296	258.96	207.17
1/2"	1/2"	2-5/8"	5"	DD4065303	325.21	260.16	DD4065304	341.14	272.91	DD4065305	341.14	272.91
1/2"	1/2"	19 mm	6"	DD4065312	365.83	292.67	DD4065313	382.35	305.88	DD4065314	382.35	305.88
5/8"	5/8"	1-1/4"	3"	DD4065322	288.88	231.09	DD4065322	329.57	263.66	DD4065323	329.57	263.66
5/8"	5/8"	1-5/8"	3-1/2"	DD4065361	293.34	234.66	DD4065362	329.52	263.62	DD4065363	329.52	263.62
5/8"	5/8"	1-1/4"	4"	DD4065371	394.73	315.78	DD4065372	409.39	327.51	DD4065373	409.39	327.51
5/8"	5/8"	16 mm	5"	DD4065391	468.37	374.69	DD4065392	482.83	386.26	DD4065393	482.83	386.26
5/8"	5/8"	3-1/4"	6"	DD4065401	542.39	433.91	DD4065402	569.34	455.47	DD4065403	569.34	455.47
3/4"	3/4"	1-1/4"	3"	DD4065421	511.13	408.89	DD4065422	530.47	424.38	DD4065423	530.47	424.38
3/4"	3/4"	1-5/8"	4"	DD4065461	514.35	411.47	DD4065462	532.56	426.04	DD4065463	532.56	426.04
3/4"	3/4"	2-3/8"	5"	DD4065471	632.21	505.76	DD4065472	648.77	519.02	DD4065473	648.77	519.02
3/4"	3/4"	25 mm	6"	DD4065491	759.68	607.74	DD4065492	772.45	617.96	DD4065493	772.45	617.96
3/4"	3/4"	4-1/8"	7"	DD4065501	889.60	711.67	DD4065502	899.58	719.67	DD4065503	899.58	719.67
1"	1"	1-1/4"	4"	DD4065555	888.22	710.57	DD4065556	904.79	723.82	DD4065557	904.79	723.82
1"	1"	1-1/4"	5"	DD4065566	961.30	769.03	DD4065567	953.79	763.02	DD4065568	953.79	763.02
1"	1"	1-1/4"	6"	DD4065588	1,094.67	875.74	DD4065589	1,081.77	865.41	DD4065590	1,081.77	865.41

9813

POW-R-PATH® IPT7 Solid Carbide 7 Flute HEM End Mills

- Specifically designed to maximize High Efficiency Machining (HEM) techniques
- Unique flute design for maximum metal removal rates
- Thick core for maximum stability and tool life
- 40° Helix
- AlCrNX coated



Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Depth of Cut Maximum (APMX)	Overall Length (OAL)	Corner Radius (RE) - 0.03"			Corner Radius (RE) - 0.06"			Corner Radius (RE) - 0.125"		
				Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
3/16"	3/16"	3/8"	2"	DD4463478	86.02	68.86	-	-	-	-	-	-
3/16"	3/16"	9/16"	2"	DD4463481	88.49	70.75	-	-	-	-	-	-
3/16"	3/16"	3/4"	2-1/2"	DD4463484	112.63	90.10	-	-	-	-	-	-
1/4"	1/4"	1/2"	2"	DD4463487	99.60	79.63	DD4463488	105.88	84.72	-	-	-
1/4"	1/4"	3/4"	2-1/2"	DD4463491	107.02	85.61	DD4463492	113.29	90.56	-	-	-
1/4"	1/4"	1"	3"	DD4463495	133.29	106.58	DD4463496	139.57	111.66	-	-	-
3/8"	3/8"	3/4"	2-1/2"	DD4463499	142.98	114.43	DD4463500	149.18	119.39	-	-	-
3/8"	3/8"	15/16"	2-1/2"	DD4463504	144.97	116.04	DD4463505	151.26	121.00	-	-	-
3/8"	3/8"	1-1/8"	3"	DD4463509	161.63	129.29	DD4463510	167.93	134.38	-	-	-
3/8"	3/8"	1-1/2"	3-1/2"	DD4463514	203.36	162.63	DD4463515	209.64	167.73	-	-	-
1/2"	1/2"	1"	3"	DD4463517	213.43	170.75	DD4463518	219.73	175.74	DD4463520	233.23	186.52
1/2"	1/2"	1-1/4"	3-1/4"	DD4463215	236.82	189.43	DD4463216	243.42	194.67	DD4463218	257.61	206.02
1/2"	1/2"	1-1/2"	3-1/2"	DD4463527	239.11	191.32	DD4463528	245.36	196.26	DD4463530	258.87	207.04
1/2"	1/2"	1-3/4"	4"	DD4463220	267.74	214.17	-	-	-	DD4463238	287.55	230.04
1/2"	1/2"	2"	4"	DD4463537	280.70	224.50	DD4463538	286.99	229.60	DD4463540	300.47	240.36
1/2"	1/2"	2-1/4"	4"	DD4463542	309.79	247.81	DD4463543	316.06	252.89	DD4463545	329.55	263.64
5/8"	5/8"	1-1/4"	3-1/2"	DD4463547	397.07	317.70	DD4463548	404.24	323.38	DD4463550	419.71	335.74
5/8"	5/8"	1-9/16"	4"	DD4463242	437.47	350.02	DD4463244	444.78	355.85	DD4463247	460.11	368.06
5/8"	5/8"	1-7/8"	4"	DD4463559	443.25	354.53	DD4463560	450.31	360.20	DD4463562	465.82	372.59
5/8"	5/8"	2-3/16"	4-1/2"	DD4463258	509.28	407.38	DD4463262	516.11	412.91	DD4463264	531.82	425.44
5/8"	5/8"	2-1/2"	5"	DD4463569	576.32	461.11	DD4463570	583.06	466.49	DD4463571	597.79	478.29
3/4"	3/4"	1-1/2"	4"	DD4463573	550.00	440.00	DD4463574	557.06	445.66	DD4463575	572.33	457.89
3/4"	3/4"	1-7/8"	4-1/2"	DD4463270	633.88	507.12	DD4463271	641.80	513.45	DD4463275	658.88	527.07
3/4"	3/4"	2-1/4"	5"	DD4463586	677.14	541.75	DD4463587	684.40	547.58	DD4463589	700.18	560.12
3/4"	3/4"	2-5/8"	5"	DD4463593	704.62	563.75	DD4463594	711.76	569.40	DD4463596	727.44	581.95
3/4"	3/4"	3"	6"	DD4463598	817.49	654.02	DD4463599	824.52	659.56	DD4463600	839.73	671.80

9795

CUTTING TOOLS

HSS M GF Titanium Nitride (TiN) Coated Spiral Point Plug Taps



List 2047G - Fractional

Thread Diameter Size (TDZ)	Threads per Inch (TPI)	Thread Tolerance Class (TCTR)	Flute Count (NOF)	Thread Cutting Part Length (THL)	Overall Length (OAL)	Order No.	Regular Price	SALE
1/4"	20	H3	2	1"	2-1/2"	MT3692500	20.31	17.61
1/4"	28	H3	2	1"	2-1/2"	MT3692501	20.45	17.13
5/16"	18	H3	2	1-1/8"	2-23/32"	MT3692502	26.46	22.12
5/16"	24	H3	2	1-1/8"	2-23/32"	MT3692503	26.46	22.12
3/8"	16	H3	3	1-1/4"	2-15/16"	MT3692504	28.56	23.88
3/8"	24	H3	3	1-1/4"	2-15/16"	MT3692505	28.56	23.88
7/16"	14	H3	3	1-7/16"	3-5/32"	MT3692506	39.37	35.86
7/16"	20	H3	3	1-7/16"	3-5/32"	MT3692507	39.37	35.86
1/2"	13	H3	3	1-21/32"	3-3/8"	MT3692508	39.70	34.48
1/2"	20	H3	3	1-21/32"	3-3/8"	MT3692509	39.70	34.48
5/8"	11	H3	3	1-13/16"	3-13/16"	MT3692510	84.45	73.37
5/8"	18	H3	3	1-13/16"	3-13/16"	MT3692511	84.45	73.37
3/4"	10	H3	3	2"	4-1/4"	MT3692512	112.24	97.37
3/4"	16	H3	3	2"	4-1/4"	MT3692513	112.24	97.37

29212

HSS M GF Taper Pipe Taps

High Speed Steel

- NPT/ANPT, NPTF
- Regular thread
- Morse List #2119



					Morse Cutting Tools, NPT, Bright			Morse Cutting Tools, NPTF, Bright		
Thread Diameter Size (TDZ)	Threads per Inch (TPI)	Flute Count (NOF)	Thread Cutting Part Length (THL)	Overall Length (OAL)	Order No.	Reg-ular Price	SALE	Order No.	Reg-ular Price	SALE
1/16"	27	4	11/16"	2-1/8"	MT4036121	39.24	35.32	MT4036141	39.24	35.32
1/8"	27	4	3/4"	2-1/8"	MT4036122	39.05	34.42	MT4036142	39.05	34.42
1/8"	27	4	3/4"	2-1/8"	MT4036123	39.05	34.42	MT4036143	39.05	34.42
1/4"	18	4	1-1/16"	2-7/16"	MT4036124	42.67	35.40	MT4036144	42.67	37.66
3/8"	18	4	1-1/16"	2-9/16"	MT4036125	56.01	50.47	MT4036145	56.01	50.47
1/2"	14	4	1-3/8"	3-1/8"	MT4036126	89.15	77.19	MT4036146	89.15	78.55
3/4"	14	5	1-3/8"	3-1/4"	MT4036127	126.15	106.84	MT4036147	126.15	113.69
1"	11.5	5	1-3/4"	3-3/4"	MT4036128	190.18	171.41	MT4036148	190.18	171.41
1-1/4"	11	5	1-3/4"	4"	MT4036129	269.29	242.69	MT4036149	269.29	242.69
1-1/2"	11.5	7	1-3/4"	4-1/4"	MT4036130	369.29	325.65	MT4036150	369.29	325.65
2"	11.5	7	1-3/4"	4-1/2"	MT4036131	496.26	447.21	MT4036151	496.26	447.21

†Small shank .3125 diameter

10007

HSS M GF Taper Pipe Taps

Interrupted Thread

- Chamfer - 2 - 3-1/2 threads
- Interrupted thread taper pipe taps reduce friction, increase chip capacity, and enhance coolant flow to the cutting teeth for reduced chance of torn threads and improve thread quality
- Recommended for a wide variety of materials, especially soft ductile materials and materials producing long continuous chips
- Morse List #2113



					NPT			NPTF		
Thread Diameter Size (TDZ)	Threads per Inch (TPI)	Flute Count (NOF)	Thread Cutting Part Length (THL)	Overall Length (OAL)	Order No.	Reg-ular Price	SALE	Order No.	Reg-ular Price	SALE
1/8"	27	5	3/4"	2-1/8"	MT4036002	62.13	54.79	MT4036022	62.13	54.79
1/8"	27	5	3/4"	2-1/8"	MT4036001	62.13	54.79	MT4036021	62.13	54.79
1/4"	18	5	1-1/16"	2-7/16"	MT4036003	68.74	61.97	MT4036023	68.74	61.97
3/8"	18	5	1-1/16"	2-9/16"	MT4036004	86.41	77.89	MT4036024	86.41	77.89
1/2"	14	5	1-3/8"	3-1/8"	MT4036005	137.86	121.61	MT4036025	137.86	121.61
3/4"	14	5	1-3/8"	3-1/4"	MT4036006	197.78	174.39	MT4036026	197.78	174.39
1"	11.5	5	1-3/4"	3-3/4"	MT4036007	307.47	277.07	MT4036027	307.47	277.07
1-1/4"	11	5	1-3/4"	4"	MT4036008	423.78	381.93	-	-	-
1-1/2"	11.5	7	1-3/4"	4-1/4"	MT4036009	569.13	512.82	-	-	-
2"	11.5	7	1-3/4"	4-1/2"	MT4036010	772.70	696.20	-	-	-

† Small shank .3125 diameter

10034

HSS M GF NC & NF Tap & Die Set

List 7120

- Each set contains
- 1/4" to 1/2" NC & NF HSS Plug Taps
- 1/4" to 1/2" NC & NF Carbon Steel 1" OD Adjustable Dies
- 1/16 Pipe Tap 1/8-27 Carbon Steel 1" OD Round
- #3 Die Stock, #4 "T" Handle Tap Wrench, & Screw Driver



Quantity	Contains	Order No.	Regular Price	SALE
25	Fractional• 1/4 to 1/2 NC & NF HSS Plug Taps• 1/4 to 1/2 NC & NF Carbon Steel 1 OD Dies• #3 Die Stock• #4 T Handle Tap Wrench• Screw Driver• See Related Products for replacement Taps, Dies, Wrench and Die Stock.	MT7937001	1,275.90	1,193.01
49	Tap & Die Set - Master • 1/4 to 1/2 NC & NF HSS Plug Taps • 1/8-27 NPT HSS Tap • 1/4 to 3/8 NC & NF, 1/8 NPT Carbon Steel 1 OD Dies • 7/16 to 5/8 NC & NF Carbon Steel 1-1/2 OD Dies • 3/4 to 1 NC & NF Carbon Steel 2 OD Dies • #3, #5 & #6† Die Stock • #13 & #15† Tap Wrenches • 2 Screwdrivers	MT7937002	3,941.45	3,685.38

29157

MORSE CUTTING TOOLS Helical Flute Thread Mills - UN Threads



- Completely CNC ground
 - Helical flute design for reduced cutting forces, smoother cuts, longest tool life, and maximum thread milling performance
 - 100% thread form; superior threads vs. tapping
 - Cuts right hand and left hand high quality threads
 - Internal and external threads
 - Suitable for all types of materials, including heat treated and difficult to machine workpieces
 - Supplied with AlTiN coating only
- Tolerance:**
- Shank diameter -.0001 to -.0003"
 - Cutter diameter ±.0005"
 - Length of cut ±.050 to .000"
 - Overall length ±.015"
 - T.I.R. maximum .0005"

Thread Size	Threads per Inch (TPI)	Connection Diameter Machine Side (DCONMS)	Usable Length (LU)	Flute Count (NOF)	Order No.	Regular Price	SALE
#6	32	1/8"	0.218"	3	MT3098600	125.80	108.23
#8	32	1/8"	1/4"	3	MT3098602	125.55	107.94
#8	36	1/8"	1/4"	3	MT3098601	128.34	110.34
#10	24	3/16"	0.312"	3	MT3098603	175.81	151.28
#10	32	3/16"	0.312"	3	MT3098604	175.81	151.28
1/4"	20	3/16"	1/2"	3	MT3098605	185.95	160.02
1/4"	28	3/16"	1/2"	3	MT3098606	185.95	160.02
5/16"	18	1/4"	5/8"	3	MT3098607	227.75	195.84
5/16"	24	1/4"	5/8"	3	MT3098608	227.75	195.84
3/8"	16	5/16"	3/4"	4	MT3098609	291.07	250.34
3/8"	24	5/16"	3/4"	4	MT3098610	291.07	250.34
7/16"	14	3/8"	7/8"	4	MT3098611	345.16	296.87
7/16"	20	3/8"	7/8"	4	MT3098612	345.16	296.87
1/2"	13	3/8"	7/8"	4	MT3098613	348.01	299.41
1/2"	20	3/8"	7/8"	4	MT3098614	348.01	299.41
9/16"	12	1/2"	7/8"	4	MT3098615	379.39	326.36
9/16"	18	1/2"	7/8"	4	MT3098616	381.60	328.32
5/8"	11	1/2"	1-1/4"	5	MT3098617	406.42	349.55
5/8"	18	1/2"	1-1/4"	5	MT3098618	397.94	342.31
3/4"	10	1/2"	1-1/4"	5	MT3098619	455.52	391.84
3/4"	16	1/2"	1-1/4"	5	MT3098620	453.31	389.88
7/8"	9	5/8"	1-1/4"	5	MT3098621	615.15	529.14
7/8"	14	5/8"	1-1/4"	5	MT3098622	615.15	529.14
1"	8	3/4"	1-3/8"	5	MT3098623	683.69	588.15
1"	12	3/4"	1-3/8"	5	MT3098624	684.11	588.44

10382



Helical Flute Thread Mills - NPT, NPTF, Pipe Threads

- AlTiN coated
- Helical flute design for reduced cutting forces, smoother cuts, longest tool life, and maximum thread milling performance
- 100% thread form; superior threads vs. tapping
- Cuts right hand and left hand high quality threads
- Internal and external threads
- Suitable for all types of materials, including heat treated and difficult to machine workpieces



Thread Size	Threads per Inch (TPI)	Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	Flute Count (NOF)	Morse Cutting Tools, NPT			Morse Cutting Tools, NPTF		
						Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
1/16"	27	0.245"	1/4"	2-1/2"	3	MT3098641	210.28	180.95	MT3098648	210.28	180.95
1/8"	27	0.31"	5/16"	2-1/2"	4	MT3098642	226.30	194.65	MT3098649	226.30	194.65
1/4"	18	0.37"	3/8"	3"	4	MT3098656	287.88	247.63	MT3098658	287.88	247.63
3/8"	18	0.37"	3/8"	3"	4	MT3098657	287.88	247.63	MT3098659	287.88	247.63
1/2"	14	0.495"	1/2"	3-1/2"	4	MT3098645	433.23	372.73	MT3098652	433.23	372.73
3/4"	14	0.495"	1/2"	3-1/2"	4	MT3098646	433.23	372.73	MT3098653	433.23	372.73
1"	11.5	0.62"	3/4"	4"	5	MT3098647	691.54	594.93	MT3098654	691.54	594.93

10009



ZEro Flute Countersinks & Deburring Tool Sets

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

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



		82 Degrees			60 Degrees			90 Degrees		
Diameter	Quantity	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
1/2" 3/8" 5/16" 5/8"	4	AV4253518	131.92	118.73	AV4253508	131.92	118.73	AV4253528	131.92	118.73
1/2" 1" 3/8" 5/16" 3/4"	5	AV4253519	233.10	209.73	AV4253509	233.10	209.73	AV4253529	233.10	209.73

9891



Tap and Drills Kits

List 8001

- 10 Popular high speed steel hand taps and drills



Quantity	Standard	Order No.	Regular Price	SALE
20	NC	MT1237103	301.38	281.76
20	NF	MT1237104	393.90	368.32
20	-	MT1237105	339.12	294.86

29209



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

- 60° Plain type
- High speed steel



Order No.	Regular Price	SALE
AV4110000	86.93	80.51

22312



Tool Tap Extension Sets



Tap Size	Style	Order No.	Regular Price	SALE
#0 thru 1/2"	5" Extension	EX6596119	1,006.64	805.30
#0 thru 1/2"	9" Extension	EX6596120	1,060.54	848.42

10669

Starrett® Univerz® Portable Bands

With Starrett Bi-Metal Unique Technology

- Triple tempered M-42 cobalt high speed steel teeth with a fatigue resistant alloy steel backer
- Patented "Twin Tooth" design
- Faster cutting and longer tool life than ordinary blades



Length	Width (W)	Thickness (H)	Teeth per Inch (TPI)	Order No.	Regular Price	SALE
44-7/8"	1/2"	0.02"	10	FX83BM10	23.80	19.29
44-7/8"	1/2"	0.02"	14	FX83BM14	23.80	19.29
44-7/8"	1/2"	0.02"	18	FX83BM18	23.80	19.29
44-7/8"	1/2"	0.02"	24	FX83BM24	23.80	19.29
44-7/8"	1/2"	0.02"	10/14 VT	FX83BM1014	23.80	19.29
44-7/8"	1/2"	0.02"	14/18 VT	FX83BM1418	23.80	19.29

† Priced each & Sold in sleeves (3 per sleeve) only. Sleeve cannot be broken

25065



Replacement Blades



ProductName	Blade Type	Shaviv Equivalent	Order No.	Regular Price	SALE
Deburring Blade, for Steel, Plastic and Aluminum	B10CO	None	FN55B10CO	3.86	2.70
Deburring Blade-TiN Coated, HSS-HD, for Very Small Holes	S150-TiN	None	FN55BK3112	5.25	3.68
N1 Right-Handed HSS Deburring Swivel Blade Deburring Blade for Steel, Plastic and Aluminum.	N1	B10	FN55N1	3.05	2.14
Deburring Blade, for Steel, Plastic and Aluminum	N1C	B10C	FN55N1C	10.88	7.61
Deburring Blade, for Steel, Plastic and Aluminum	N1D	None	FN55N1D	18.38	12.86
Deburring Blade, left handed, for Steel, Plastic and Aluminum	N1LH	None	FN55N1LH	4.33	3.02
Deburring Blade, for High Wear Materials	N1TiN	B10P	FN55N1TiN	3.96	2.77
Deburring Blade, for Brass and Cast Iron	N2	B20	FN55N2	3.05	2.14
Deburring Blade, for Brass and Cast Iron	N2C	B20C	FN55N2C	10.89	7.63
Deburring Blade, to Remove External & Internal Burrs	N3	B30	FN55N3	3.92	2.74
Deburring Blade, for Inside Cross Holes & Back	N6	B60	FN55N6	5.88	4.11
Deburring Blade, for Steel, Aluminum and Plastic	S10	E100	FN55S10	4.00	2.80
NOGA S100 COBALT HD BLADE	S100	None	FN55S100	4.65	3.24
Deburring Blade, HSS-HD, for Small Holes	S101	None	FN55S101	4.14	2.89
Deburring Blade, left handed, for Small Holes	S101LH	None	FN55S101LH	4.87	3.41
Deburring Blade, left handed, for Steel, Aluminum and Plastic	S10D	None	FN55S10D	18.90	13.23
Deburring Blade, left handed, for Steel, Aluminum and Plastic	S10LH	None	FN55S10LH	5.53	3.87
NOGA S10TiN HD BLADE TiN	S10TiN	E100P	FN55S10TiN	5.03	3.51
NOGA S150 HEAVY DUTY	S150	None	FN55S150	4.58	3.20
Deburring Blade, HSS-HD, for Brass and Cast Iron	S20	E200	FN55S20	4.40	3.08
Deburring Blade, for Fine Point for Brass & Cast Iron	S202	None	FN55S202	4.58	3.20
Deburring Blade, for Removing External & Internal Burrs	S30	E300	FN55S30	4.40	3.08
Deburring Blade, HSS-HD, for Straight Edges	S35	E350	FN55S35	4.52	3.16
Deburring Blade, for Inside Cross Hole & Back	S60	E600	FN55S60	6.23	4.36

24088



S Promo Set

- Deburs: steel, aluminum and plastic.
- Includes: NogaGrip 1 handle, 10 Pcs. S10 blades



Order No.	Regular Price	SALE
FN55NG8150	24.15	21.70

10113



Reversible Countersinks

- RC1000 - very fine tool for deburring both back side and front side of holes. Unique 2 pairs of cutting edges. Cuts in both clockwise and anti clockwise directions.
- RC2000 - similar to RC1000 only larger
- RC2200 - similar to RC2000 only larger



Included	Order No.	Regular Price	SALE
Steel Handle / R1 Blade	FN55RC1000	44.14	39.76
Steel Handle / R2 Blade	FN55RC2000	44.14	39.76
Steel Handle / R3 Blade	FN55RC2200	52.54	47.32
Set of all 3	FN55RC3300	140.84	126.71

22419



NG Handles & S & N Holders



For Use With	Type	Order No.	Regular Price	SALE
N Blades	N Blade Holder	FN55EL01003	10.26	7.70
S Blades	S Blade Holder	FN55EL02003	10.26	7.70
S Blades	NG-1 Handle	FN55NG1000	12.81	9.60
N Blades	NG-2 Handle	FN55NG2000	13.13	9.85
All Blade Holders	NG-3 Handle	FN55NG3000	13.13	9.85

24075



Ceramic Convexed Cera-Cut

- Ideal for all plastic materials, soft metals, surface scraping and parting line deflashing
- Blade can be replaced
- Includes: Cera-Cut handle and 250mm convexed radius blade



Order No.	Regular Price	SALE
FN55CR2000	51.49	46.29

24068



Double Burr

- Includes: Double burr, hand guard, 2 x N80 blades
- Simultaneously removes burrs from both sides of sheet metal
- Hand guard for safety
- Use one blade only for corners



Order No.	Regular Price	SALE
FN55DB1000	34.58	31.11

10075



Universal Handy Chuck Holder

Model PV1000

- Aluminum handle with non-slip covering
- 3-Jaw chuck helps with the quick and secure clamping of a wide variety of tools. blades and blade holders such as scrapers, countersinks, files, etc.
- Hardness 58 Hrc



Order No.	Regular Price	SALE
FN55PV1000	85.79	64.34

10120



Small Diameter Cut-Off Wheels

Gemini:

- Aluminum oxide grain
- Best for steel and ferrous metals as well as aluminum and foundries

Bluefire:

- Zirc/AO blend
- For light to heavy applications on gray iron, carbon, stainless steel and alloys



Gemini					
Diameter	Thickness	Arbor Hole	Order No.	Regular Price	SALE
3"	0.035"	1/4"	MH60030010627	5.04	4.00
3"	0.035"	3/8"	MH60030010628	5.04	4.00
3"	1/16"	1/4"	MH60030010645	5.04	4.00
3"	1/16"	3/8"	MH60030010647	4.97	4.00
3"	1/16"	1/4"	MH60030010649	3.40	2.71
4"	0.035"	1/4"	MH60040010629	6.93	5.57
4"	0.035"	3/8"	MH60040010630	7.77	6.27
4"	1/16"	1/4"	MH60040010654	6.86	5.46
4"	1/16"	3/8"	MH60040010655	6.86	5.46

Blue Fire					
Diameter	Thickness	Arbor Hole	Order No.	Regular Price	SALE
3"	0.035"	3/8"	MH60030028629	24.30	19.44
3"	0.035"	3/8"	MH60030043174	8.20	6.53
3"	1/16"	3/8"	MH60030043175	8.33	6.70
4"	1/16"	3/8"	MH60040043171	11.30	9.04
4"	0.035"	3/8"	MH60040043173	11.30	9.04

24139



Reinforced Toolroom Cut-Off Wheels

- Layers of fiberglass mesh extending from the wheel's center to its periphery, help these wheels withstand lateral stress and rough usage
- Contains premium aluminum oxide with high temperature resin bonds formulated for long life and fast cutting ability
- Package quantity: 25



Diameter	Thickness	Arbor Hole	Specification	Order No.	Regular Price	SALE
3"	0.06"	1/4"	A60-OBNA2	MH60030028471	11.63	9.25
3"	0.06"	3/8"	A60-OBNA2	MH60030028552	11.63	9.25
6"	0.035"	1/2"	A60-OBNA2	MH60060035053	35.60	28.53
6"	0.06"	1/2"	A60-OBNA2	MH60060035164	73.70	59.02
6"	0.06"	1-1/4"	A60-OBNA2	MH60060035165	45.33	36.23
7"	1/16"	5/8"	57A364-TB25N	MH60070022673	84.46	67.56
7"	0.035"	5/8"	A60-OBNA2	MH60070038787	45.33	36.23
7"	0.035"	1-1/4"	A60-OBNA2	MH60070038788	49.77	39.74
7"	0.06"	1-1/4"	A602-OBNA2	MH60070038796	49.77	39.74
7"	0.06"	5/8"	A60-OBNA2	MH60070038811	46.03	36.83
8"	0.035"	5/8"	A60-OBNA2	MH60080042979	57.81	46.21
8"	0.06"	5/8"	A60-OBNA2	MH60080042981	57.81	46.21
8"	0.06"	1-1/4"	A60-OBNA2	MH60080042983	57.81	46.21

24155



Long Life Premium Aluminum Oxide Cutting Wheels

- Delivers the right combination of performance and value
- Versatile line up offers a long life solution for all your general purpose applications
- Best on carbon steel, structural steel, cast iron and general purpose metal use



					Arbor Hole - 7/8" Type 1				Arbor Hole - 5/8"-11, Type 27				Arbor Hole - 7/8", Type 27			
Diameter	Thickness	Grit	Specification	Maximum RPM	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE			
4 1/2"	.045"	60	A60T	13,000	MK5157020	5.36	4.28	MK5157040	9.10	7.28	MK5157041	5.71	4.56			
4 1/2"	1/4"	24	A24R	13,000	-	-	-	MK5157120	10.11	8.09	MK5157121	5.95	4.76			

25434



Premium Aluminum Oxide Cutting Wheels

- Premium aluminum oxide grains provide an even, sharp, clean cut and a hard bond extends life and maximizes performance
- Type 1



Diameter	Thickness	Arbor Hole	Specification	Maximum RPM	Standard Pack	Order No.	Regular Price	SALE
3"	.035"	3/8"	A60T	25,000	100	MK5157001	3.81	3.05
3"	1/16"	3/8"	A36T	25,000	100	MK5157060	3.81	3.05

788



Zip One Aluminum Oxide Type 1 Cut Off Wheel

- Fast, free precision cuts
- Clean cutting for less rework
- Unique mix of abrasive grains ensures cool cutting for less discoloration and warping
- Fe-free formulation-guaranteed not to contaminate stainless steel



Diameter	Thickness	Arbor Hole	Grit	Maximum RPM	Standard Pack	Order No.	Regular Price	SALE
4 1/2"	1/32"	7/8"	60	13,000	25	WS0111T542	8.15	7.33

710

3M 3M™ Silver Type 1 Cut Off Wheels

- Engineered precision-shaped grain designed to deliver an unbeatable combination of performance and value



Diameter	Thickness	Arbor Hole	Maximum RPM	Order No.	Regular Price	SALE
3"	.035"	1/4"	25,465	TM0187457	3.42	3.05
3"	.035"	3/8"	25,465	TM0187458	3.37	3.05
3"	.060"	3/8"	25,465	TM0187459	3.86	3.47
4"	.035"	1/4"	19,100	TM0187460	3.67	3.33
4"	.035"	3/8"	19,100	TM0187461	3.67	3.33
4"	.060"	3/8"	19,100	TM0187462	4.31	3.89
4-1/2"	.040"	7/8"	13,300	TM0187464	4.65	4.15
4-1/2"	.045"	7/8"	13,300	TM0187465	4.65	4.15
4-1/2"	.045"	7/8"	13,300	TM0187466	4.65	4.15
5"	.045"	7/8"	12,250	TM0187467	4.90	4.43
5"	.045"	7/8"	12,250	TM0187468	4.93	4.43
6"	.045"	7/8"	10,200	TM0187469	7.69	6.93
6"	.045"	7/8"	10,200	TM0187470	8.51	7.63

147



Thin Flex Cut-Off Wheels

- Zirconia grain
- Thin, flexible and fiberglass reinforced
- High performance for cutting and notching applications
- Use on ferrous metals (iron, steel, welds), stainless steel and high tensile alloys



Diameter	Arbor Hole	Thickness	Grit	Order No.	Regular Price	SALE
4 1/2"	7/8"	.035"	60	SP010450357160Z	3.77	2.63
5"	7/8"	.040"	60	SP010500407160Z	4.28	2.99
6"	7/8"	.040"	60	SP010600407160Z	4.84	3.38

25178

SURF PRO Small Diameter Thin Cut-Off Wheels - Aluminum Oxide - Type 1

- Aluminum oxide grain
- Fiberglass reinforced
- General purpose rapid cutting applications
- Use for thin gauge sheet stock, thin walled tubing and small diameter cross sections
- Economical choice for cutting iron, steel, stainless steel and other materials



Diameter	Arbor Hole	Thickness	Grit	Specification	Maximum RPM	Order No.	Regular Price	SALE
2"	1/8"	.060"	36	A36-T-BF	30,550	SP010200601136A	4.83	3.38

30933

SURF PRO Small Diameter Thin Cut-Off Wheels - Zirconia - Type 1

- Zirconia grain
- High performance for cutting and notching applications
- Use on ferrous metals (iron, steel, welds), stainless steel and high tensile alloys



Diameter	Thickness	Arbor Hole	Grit	Order No.	Regular Price	SALE
2"	.060"	1/4"	46	SP010200602146Z	4.77	3.34

30934

SURF PRO High Performance Cut-Off Wheels

- High performance aluminum oxide grain
- Thin width for minimal material loss
- Double reinforced
- Quick, clean cuts and longer wheel life
- Less down time for wheel changes
- Reduced cost, increased productivity



Diameter	Thickness	Arbor Hole	Wheel Type	Order No.	Regular Price	SALE
3"	.040"	3/8"	Type 1	SP010304038HPA	1.74	1.21
3"	1/16"	3/8"	Type 1	SP010311638HPA	1.74	1.21
4 1/2"	.045"	7/8"	Type 1	SP014504578HPA	2.17	1.52
6"	.045"	7/8"	Type 1	SP010604578HPA	4.59	3.22

680

CGW Fast Cut Stationary Saw Wheels

- Aluminum oxide grain for use on metal, steel and general applications



Diameter	Thickness	Arbor Hole	Specification	Maximum RPM	Standard Pack	Order No.	Regular Price	SALE
12"	1/8"	1"	A24-RBF	5100	10	MG9070105	11.58	10.43
20"	5/32"	1"	A24-RBF	3100	10	MG9070108	51.84	46.66
20"	3/16"	1"	A24-RBF	3100	10	MG9070109	58.42	52.62

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CGW Super Quickie Cut Reinforced Cut-Off Wheels

Type 1 & Type 27

#1 Wheel choice for steel applications.



						Type 1			Type 27		
Diameter	Thickness	Arbor Hole	Maximum RPM	Specification	Standard Pack	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
4 1/2"	.045"	7/8"	13300	A60-TRF	50	MG9045102	4.73	4.18	MG9045103	4.58	4.15

22873

CGW Reinforced Cut-Off Wheels

For Hand Held Grinders

- Ideal for cutting off ferrous metals, alloy steels and cast iron.
- Aluminum oxide abrasive - fast cutting action.
- Resinoid bond - long life - burn free cutting.
- High strength reinforcement - resists breakage



Aluminum Oxide								
Diameter	Thickness	Arbor Hole	Specification	Maximum RPM	Standard Pack	Order No.	Regular Price	SALE
1 1/2"	1/32"	1/4"	A60-RBF	45000	50	MG9035687	2.81	2.54
1 1/2"	1/16"	1/4"	A60-RBF	45000	50	MG9035688	2.81	2.54
2"	1/32"	3/8"	A60-RBF	30000	50	MG9035689	2.81	2.54
2"	1/16"	1/4"	A36-TBF	30000	50	MG9045066	2.81	2.54
2"	1/16"	3/8"	A36-RBF	30000	50	MG9035690	2.81	2.54
2"	1/8"	3/8"	A24-RBF	30000	50	MG9035691	3.09	2.77
3"	1/32"	1/4"	A60-RBF	25000	50	MG9035500	2.81	2.54
3"	1/32"	3/8"	A60-RBF	25000	50	MG9035501	2.81	2.54
3"	1/16"	1/4"	A36-RBF	25000	50	MG9035502	2.84	2.53
3"	1/16"	1/4"	A60-RBF	25000	50	MG9045085	2.84	2.53
3"	1/16"	3/8"	A36-RBF	25000	50	MG9035503	2.84	2.53
3"	1/16"	3/8"	A60-RBF	25000	50	MG9045086	2.84	2.53
3"	1/8"	1/4"	A24-RBF	25000	50	MG9035504	3.22	2.85
3"	1/8"	3/8"	A24-RBF	25000	50	MG9035505	3.22	2.85
4"	1/32"	1/4"	A60-RBF	19100	50	MG9035506	3.63	3.27
4"	1/32"	3/8"	A60-RBF	19100	50	MG9035507	3.63	3.27
4"	1/16"	1/4"	A36-RBF	19100	50	MG9035508	3.98	3.61
4"	1/16"	1/4"	A60-RBF	19100	50	MG9045088	3.98	3.61
4"	1/16"	3/8"	A36-RBF	19100	50	MG9035509	3.98	3.61
4"	1/16"	3/8"	A60-RBF	19100	50	MG9045087	3.98	3.61
4"	1/16"	5/8"	A36-RBF	19100	50	MG9035510	3.98	3.61
4"	1/8"	1/4"	A24-RBF	19100	50	MG9035511	4.48	4.01
4"	1/8"	3/8"	A24-RBF	19100	50	MG9035512	4.48	4.01

Aluminum Oxide, Fast Cut								
Diameter	Thickness	Arbor Hole	Specification	Maximum RPM	Standard Pack	Order No.	Regular Price	SALE
4"	1/32"	1/4"	A60-RBF	19100	50	MG9059106	1.53	1.35

236

3M Utility Cloth Rolls

- Aluminum oxide - X and J wt. cloth
- Constructed on a durable cloth backing
- Ideal for all utility jobs
- Can be torn into strips and rolled without shelling



Width	Length	Backing Weight	Grit	Standard Pack	Order No.	Regular Price	SALE
1"	50 yard	X	50	5	TM1219794	77.77	69.39
1"	50 yard	X	60	5	TM1219793	72.10	64.96
1"	50 yard	J	80	5	TM1219792	60.90	54.79
1"	50 yard	J	120	5	TM1219790	58.88	52.93
1"	50 yard	J	150	5	TM1219789	58.88	52.93
1"	50 yard	J	180	5	TM1219788	58.88	52.93
1"	50 yard	J	220	5	TM1219787	58.88	52.93
1"	50 yard	J	240	5	TM1219786	58.88	52.93
1"	50 yard	J	280	5	TM1219785	58.88	52.93
1"	50 yard	J	400	5	TM1219783	58.88	52.93
1 1/2"	50 yard	X	50	5	TM1219813	107.63	96.85
1 1/2"	50 yard	J	80	5	TM1219811	85.29	76.81
1 1/2"	50 yard	J	120	5	TM1219809	82.24	73.97
1 1/2"	50 yard	J	150	5	TM1219808	82.24	73.97
1 1/2"	50 yard	J	180	5	TM1219807	82.24	73.97
1 1/2"	50 yard	J	220	5	TM1219806	82.24	73.97
1 1/2"	50 yard	J	240	5	TM1219805	82.24	73.97
1 1/2"	50 yard	J	280	5	TM1219804	82.24	73.97
1 1/2"	50 yard	J	400	5	TM1219802	82.24	73.97
2"	50 yard	X	50	5	TM1219825	139.09	125.18
2"	50 yard	X	60	5	TM1219824	131.00	117.89
2"	50 yard	J	80	-	TM1219823	109.66	98.71
2"	50 yard	J	100	5	TM1219822	104.58	94.15
2"	50 yard	J	120	5	TM1219821	104.58	94.15
2"	50 yard	J	150	5	TM1219820	104.58	94.15
2"	50 yard	J	180	5	TM1219819	104.58	94.15
2"	50 yard	J	220	5	TM1219818	104.58	94.15
2"	50 yard	J	240	5	TM1219817	104.58	94.15
2"	50 yard	J	280	5	TM1219816	104.58	94.15
2"	50 yard	J	320	5	TM1219815	104.58	94.15
2"	50 yard	J	400	5	TM1219814	104.58	94.15



Wheel Adapters / Cut Off Wheel

Mandrels

- Wheel adapter for use with cut off wheels
- Screw head type is slotted for Quick Change - Holds wheel flush
- Nut type includes arbor, hex nut and washers



Mandrel Adapter, Screw Head						
Arbor Hole	Shank	Length	Washer OD	Order No.	Regular Price	SALE
1/4"	1/4"	2.15"	3/4"	SP24001414SH	10.96	7.67
1/4" or 3/8"	1/4"	2.15"	3/4"	SP24143814SH	12.61	8.83
3/8"	1/4"	2.15"	3/4"	SP24003814SH	10.96	7.67

Arbor Adapter, Nut Type						
Arbor Hole	Shank	Length	Washer OD	Order No.	Regular Price	SALE
1/4"	1/4"	2.50"	1"	SP24001414NT	10.39	7.26
3/8"	1/4"	2.50"	1"	SP24003814NT	10.39	7.26
1/2"	1/4"	2.50"	1 1/2"	SP24001214NT	11.24	7.86

696

3M Scotch-Brite™ Surface Conditioning Discs - Hook-and-Loop

- Aluminum Oxide
- Great general purpose surface conditioning disc
- For finishing, cleaning and light deburring
- Attach and remove easily to 3M™ Hook-and-Loop Backup Pads
- Use with right angle and random orbital tools
- 7" Available



Diameter	Maximum RPM	Grade	Color	Standard Pack	Order No.	Regular Price	SALE
4 1/2"	13000	Coarse	Brown	50	TM2114101	6.64	5.90
4 1/2"	13000	Medium	Maroon	50	TM2114100	5.84	5.25
4 1/2"	13000	Very Fine	Teal	50	TM2114099	5.84	5.25
5"	10000	Coarse	Brown	50	TM2100750	7.97	7.19
5"	10000	Medium	Maroon	50	TM2100643	7.00	6.32
5"	10000	Very Fine	Teal	50	TM2104303	7.00	6.32
7"	6000	Coarse	Brown	25	TM2100751	13.71	12.36
7"	6000	Medium	Maroon	25	TM2100645	12.04	10.79
7"	6000	Very Fine	Teal	25	TM2104305	12.04	10.79

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Air Cooled Quick Change Holder

Pads

- Serated pad air cools disc for reduced loading and longer disc life
- Multiple mounting option available



Diam-eter	Disc Mount	Style	Maximum RPM	Order No.	Regular Price	SALE
1 1/2"	TR	Air Cooled Quick Change	30,000	SP24QCH15TR14SC	17.04	12.29
1 1/2"	TS	Air Cooled Quick Change	30,000	SP24QCH15TS14SC	17.04	12.29
2"	TR	Air Cooled Quick Change	30,000	SP24QCH20TR14SC	17.74	12.79
2"	TS	Air Cooled Quick Change	30,000	SP24QCH20TS14SC	17.74	12.79
3"	TR	Air Cooled Quick Change	20,000	SP24HK3TR14M58A	51.56	37.17
3"	TR	Air Cooled Quick Change	20,000	SP24QCH30TR14SC	20.06	14.46
4"	TR	Air Cooled Quick Change	15,000	SP24QCH40TR14SC	32.44	23.39
4"	TS	Air Cooled Quick Change	15,000	SP24QCH40TS14SC	32.44	23.39
3"	TS	Air Cooled Quick Change	20,000	SP24QCH30TS14SC	20.06	14.46

22031

3M Stikit™ Disc Rolls 236U

- Aluminum Oxide - C weight paper backing
- Discs for paint, primer, wood, metal, plastic and fiberglass
- Strong paper backing provides durability and increased cut rates
- Open coat and stearate coating minimizes loading
- 100 Discs per roll, 4 rolls per case



Diameter - 6"			
Grit	Order No.	Regular Price	SALE
P80	TM1155560	139.90	125.90
P120	TM1155562	129.14	116.17
P320	TM1155567	129.14	116.17

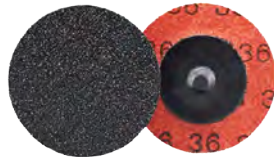
Diameter - 5"			
Grit	Order No.	Regular Price	SALE
P150	TM1155543	91.45	82.27
P120	TM1186490	91.45	82.27
P180	TM1186492	91.45	82.27
P320	TM1186495	91.45	82.27

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R766 Cloth Discs

- Our unique premium abrasive and aluminum oxide blend provides aggressive cut and longer life than competitive aluminum oxide materials
- The new resin system improves base adhesion and reduces grain shedding
- Durable, Y-wt. 2-ply polyester backing stands up to demanding applications
- New grain coating ensures life and faster cut rate



			TR Type III			TS Type II		
Diam-eter	Grit	Standard Pack	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
2"	24	100	MH61D0219013	1.35	0.95	-	-	-
2"	P36	100	-	-	-	MH61D0218999	2.28	1.76
2"	P40	100	-	-	-	MH61D0219000	2.17	1.69
2"	P60	100	-	-	-	MH61D0219003	2.22	1.62
2"	P80	100	MH61D0219009	2.17	1.62	MH61D0219004	2.17	1.62
3"	P36	50	MH61D0319027	3.39	2.52	-	-	-
3"	P40	50	-	-	-	-	-	-
3"	P50	50	MH61D0319029	3.28	2.38	-	-	-
3"	P60	50	MH61D0319030	3.07	2.25	MH61D0319024	3.21	2.35

1-1/2" Holder: TS - MH61A43200, TR - MH61A475002" Holder: TS - MH61A43210, TR - MH61A4551033" Holder: TS - MH61A43225, TR - MH6155105

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3M PSA Discs 348D



Diameter	Grit	Standard Pack	Order No.	Regular Price	SALE
2"	80	50	TM1120909	1.40	1.28

30940

SURF PRO Ceramic Grain Quick Change Abrasive Discs



Diameter	Grit	Order No.	Regular Price	SALE
2"	36	SP11QCR20036C	1.74	1.42

30932

ABRASIVES



Metallurgical Silicon Carbide Sanding Discs

- Pasco Metallurgical Silicon Carbide Sanding Discs



Plain Back					
Diameter	Grit	Standard Pack	Order No.	Regular Price	SALE
8"	60/60	25	MG9452931	1.18	1.02
8"	120/120	100	MG9452932	0.74	0.67
8"	600/1200	100	MG9452937	0.60	0.54
12"	240/240	100	MG9452941	1.25	1.07

PSA					
Diameter	Grit	Standard Pack	Order No.	Regular Price	SALE
8"	120/P120	100	MG9452946	1.04	0.93
8"	180/P180	100	MG9452947	0.97	0.82
8"	240/P240	100	MG9452948	0.88	0.79
8"	320/P400	100	MG9452949	0.88	0.79
8"	600/P1200	100	MG9452951	0.88	0.79
12"	60/P60	100	MG9452952	3.28	2.92
12"	180/P180	100	MG9452954	1.96	1.77
12"	320/P400	100	MG9452956	1.81	1.62
12"	400/P800	100	MG9452957	1.81	1.62

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Abrasive Belts

- Norton Abrasive Belts - Premier belts for production metal finishing
- Aluminum Oxide - Versatile abrasive for general purpose applications, X weight cloth back
- Zirconia Alumina - Recommended for removal and finish on ferrous and non-ferrous metals, X weight polyester back
- Ceramic Alumina - Recommended for finishing exotic alloys, Y weight polyester back



Aluminum Oxide					
Width	Length	Grit	Order No.	Regular Price	SALE
4	36	60	MH61B0422095	13.98	10.44
1	42	60	MH61B0120900	5.92	4.38
6	48	40	MH61B0622585	46.41	34.73
6	48	60	MH61B0622575	33.03	24.73
6	48	80	MH61B0622570	25.72	19.27
6	48	120	MH61B0622560	24.93	18.7

Zirconia Alumina					
Width	Length	Grit	Order No.	Regular Price	SALE
6	48	36	MH61B0627698	35.85	26.85
6	48	40	MH61B0627697	38.02	28.42
6	48	60	MH61B0628937	33.63	25.15
6	48	120	MH61B0628931	29.68	22.23
2	48	80	MH61B0227099	9.59	7.18
2	48	120	MH61B0228615	10.46	7.79

24108



Aluminum Oxide Cloth PSA Discs-No Hole Type

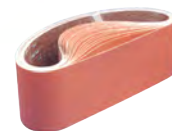
- For use on disc grinders and sanders
- Long wearing, fast cutting abrasive
- Heavy-duty "X" weight resin cloth
- Easily removed without leaving residue on holders or backing plates

Diam-	40			60			80			100			120			36		
	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
2"	SP11PSAD02040A	0.60	0.27	SP11PSAD02060A	0.56	0.26	SP11PSAD02080A	0.55	0.51	-	-	-	SP11PSAD03100A	0.80	0.35	SP11PSAD03120A	0.80	0.35
3"	SP11PSAD03040A	0.91	0.42	-	-	-	SP11PSAD03080A	0.83	0.36	-	-	-	SP11PSAD05120A	1.44	1.10	SP11PSAD05036A	2.06	1.58
5"	-	-	-	-	-	-	SP11PSAD05080A	1.50	1.16	-	-	-	SP11PSAD06120A	2.11	1.00	-	-	-
6"	SP11PSAD06040A	2.48	2.00	-	-	-	SP11PSAD06080A	2.18	1.63	SP11PSAD06100A	2.11	1.00	SP11PSAD08120A	3.81	1.85	SP11PSAD08036A	4.65	4.13
8"	SP11PSAD08040A	4.42	2.16	SP11PSAD08060A	4.05	3.08	SP11PSAD08080A	3.91	2.84	SP11PSAD08100A	3.82	1.86	SP11PSAD09120A	4.87	3.94	-	-	-
9"	SP11PSAD09040A	5.64	4.34	-	-	-	SP11PSAD09080A	5.01	3.76	-	-	-	-	-	-	-	-	-
10"	SP11PSAD10040A	6.79	5.29	-	-	-	SP11PSAD10080A	7.42	5.71	SP11PSAD10100A	5.82	4.48	-	-	-	-	-	-
12"	-	-	-	-	-	-	-	-	-	SP11PSAD12100A	8.82	4.36	SP11PSAD12120A	8.79	4.34	SP11PSAD12036A	10.70	9.36
15"	-	-	-	-	-	-	SP11PSAD15080A	15.04	7.47	SP11PSAD15100A	14.21	7.05	-	-	-	SP11PSAD15036A	18.19	9.04
16"	-	-	-	SP11PSAD16060A	18.66	9.28	SP11PSAD16080A	18.07	8.98	-	-	-	SP11PSAD16120A	17.61	8.75	SP11PSAD16036A	21.08	10.49
20"	-	-	-	SP11PSAD20060A	22.08	16.99	SP11PSAD20080A	20.71	15.94	SP11PSAD20100A	23.45	11.67	SP11PSAD20120A	23.37	11.63	-	-	-
24"	SP11PSAD24040A	41.51	29.41	-	-	-	SP11PSAD24080A	37.20	26.97	SP11PSAD24100A	35.57	17.73	SP11PSAD24120A	35.42	17.66	-	-	-

25147

3M Abrasive Belts - 241D

- Aluminum oxide - X wt. cloth
- Excellent all around abrasive belt for blending and finishing



Width	Length	Grit	Order No.	Regular Price	SALE
1"	42"	60	TM1001450	4.54	4.01
1"	42"	80	TM1001451	4.10	3.72
1"	42"	100	TM1001452	3.84	3.43
1"	42"	120	TM1001453	3.84	3.43
6"	48"	60	TM1001457	19.98	18.03
6"	48"	80	TM1010454	18.14	16.31
6"	48"	100	TM1010455	17.01	15.30
6"	48"	120	TM1010456	17.01	15.30
2"	72"	180	TM1026309	7.31	6.59
2"	72"	60	TM1026316	8.55	7.74
2"	72"	80	TM1033067	7.78	7.01
2"	72"	240	TM1081752	7.31	6.59

22576



Flexible Diamond Hand Pads

- Lightweight and durable conformable back- ing adapts to a variety of surfaces.
- Precision dot pattern allows aggressive consistent cut rate, uniform finish and reduced loading.
- Can be used wet or dry, no dressing required.
- Color coded for easy identification.
- For shaping and rapid stock removal, touchup and repairs on ceramic, stone, marble, glass, composite and hard materials.
- Also used for polished dies and molds.



Width	Length	Grit	Color	Order No.	Regular Price	SALE
2 1/8"	3 1/2"	400	Yellow	MH63HP05852	47.96	38.43
2 1/8"	3 1/2"	60	Green	MH63HP06360	87.96	70.43
2 1/8"	3 1/2"	120	Black	MH63HP06361	71.83	57.49
2 1/8"	3 1/2"	200	Red	MH63HP06362	60.83	48.60
2 1/8"	3 1/2"	800	White	MH63HP06363	47.96	38.43
2 1/8"	3 1/2"	1800	Blue	MH63HP06364	47.96	38.43

24138



NORTON Abrasive Sheets - 9" x 11"

Aluminum Oxide Cloth Sheets - Metalworking

- Aluminum oxide with high temperature resin bond
- Long life and sharp, fast, cutting action
- Use on carbon & alloy steels, all metals & hard wood

Silicon Carbide Waterproof Paper Sheets - Metalworking & Woodworking

- Ideal for all materials, and prepaint applications
- Waterproof
- Standard pack: 60, 80 Grit, 25 pack - 100-800 grit, 50 pack



Aluminum Oxide				
Grit	Sheets Per Package	Order No.	Regular Price	SALE
P60	25	MH61S91101861	4.06	2.96
P80	25	MH61S91126340	3.46	2.54
P100	50	MH61S91126339	3.21	2.39
P120	50	MH61S91126338	3.21	2.39
P150	50	MH61S91126337	3.21	2.39
P180	50	MH61S91126336	3.21	2.39
P240	50	MH61S91126334	3.21	2.39
P320	50	MH61S91126332	3.21	2.39

Silicon Carbide				
Grit	Sheets Per Package	Order No.	Regular Price	SALE
180	50	MH61S91101150	3.00	2.28
220	50	MH61S91139367	2.68	2.04
240	50	MH61S91139366	2.68	2.04
320	50	MH61S91139364	2.68	2.04
400	50	MH61S91139362	2.68	2.04
500	50	MH61S91139361	2.68	2.04
600	50	MH61S91139360	2.68	2.04

24112

SURF PRO 9" x 11" Wet or Dry Silicon Carbide Finishing Paper Sheets

- 60 Grit thru 180 grit C-weight
- 220 Grit and finer A-weight



Grit	Order No.	Regular Price	SALE
60	SP12S911060S	1.12	0.84
80	SP12S911080S	1.06	0.84
120	SP12S911120S	1.04	0.84
150	SP12S911150S	0.84	0.70
180	SP12S911180S	0.77	0.56
220	SP12S911220S	0.77	0.56
240	SP12S911240S	0.67	0.56
280	SP12S911280S	0.77	0.56
320	SP12S911320S	0.73	0.56
360	SP12S911360S	0.73	0.56
400	SP12S911400S	0.73	0.56
500	SP12S911500S	0.73	0.56
600	SP12S911600S	0.73	0.56
1000	SP12S9111000S	0.77	0.56

10739

SURF PRO Bench & Pedestal Grinding Wheels - Aluminum Oxide

- Aluminum oxide grain
- Used for general purpose grinding and tool sharpening
- For ferrous metals (carbon steel, steel, iron, forgings, etc)
- Convenient single pack



Diameter	Width	Arbor Hole	Grit	Order No.	Regular Price	SALE
6"	3/4"	1"	36	SP01063041A036O	36.40	26.20
6"	3/4"	1"	60	SP01063041A060M	45.18	32.52
6"	3/4"	1"	80	SP01063041A080M	36.40	26.20
6"	1"	1"	36	SP01064041A036O	41.90	30.17
6"	1"	1"	60	SP01064041A060M	41.90	30.17
6"	1"	1"	80	SP01064041A080M	52.00	37.43
7"	1"	1"	36	SP01074041A036O	58.60	42.19
7"	1"	1"	60	SP01074041A060M	58.59	42.18
8"	1"	1"	36	SP01084041A036O	78.53	56.53
8"	1"	1"	60	SP01084041A060M	78.51	56.53
8"	1"	1"	80	SP01084041A080M	78.51	56.53

28695

NORTON Quantum 3 Depressed Center Wheels - Type 27 - 1/4" Wide

- Reduced hand fatigue from less cutting vibration
- For high metal removal and reduced pressure from faster cutting action
- Less downtime & waste



Diameter	Arbor Hole	Maximum RPM	Order No.	Regular Price	SALE
4 1/2"	5/8"-11	13,580	MH60D045070793	31.09	24.87
4 1/2"	7/8"	13,580	MH60D045070794	26.60	21.28
5"	5/8"-11	12,225	MH60D050070795	34.80	27.84
5"	7/8"	12,225	MH60D050070796	31.09	24.87
6"	5/8"-11	10,185	MH60D060070797	42.97	34.37
6"	7/8"	10,185	MH60D060070798	37.83	30.26
7"	5/8"-11	8,600	MH60D070070799	45.14	36.10
7"	7/8"	8,600	MH60D070070800	39.66	31.72

478

UNITED GRINDERS, INC. 4-1/2" Depressed Center Wheels - Type 27 - Aluminum Oxide

Use with Right Angle Air/Electric Grinders

A24 N Grade

- Soft bond for fast stock removal
- Ideal for ferrous metals and low grade stainless

A24 R Grade

- Medium bond for longer life
- Ideal for general purpose grinding of ferrous metals



				A24R			A24N		
Diameter	Width	Arbor Hole	Maximum RPM	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
4 1/2"	1/4"	7/8"	13,300	MG4120063	5.40	4.39	MG4120060	5.40	4.39
4 1/2"	1/4"	5/8"-11	13,300	MG4120163	9.52	7.61	MG4120160	9.52	7.61

25344

3M Cubitron II Type Q De- pressed Center Grinding Wheels

- 3M Cubitron II Type-Q depressed center grinding wheel uses ceramic aluminum oxide as the abrasive material
- Can be run at a maximum speed of 8,500 RPMs



Diameter	Width	Arbor Hole	Maximum RPM	Order No.	Regular Price	SALE
4 1/2"	1/4"	5/8"-11	13,300	TM0187397	9.59	8.61
4 1/2"	1/4"	5/8"-11	13,300	TM0187453	6.02	5.40
5"	1/4"	5/8"-11	12,250	TM0187446	10.92	9.85
5"	1/4"	7/8"	12,250	TM0187467	21.83	19.71
5"	1/4"	7/8"	12,250	TM0187454	6.99	6.24
7"	1/4"	5/8"-11	8,500	TM0187448	15.48	14.00
7"	1/4"	5/8"-11	8,500	TM0187451	13.33	11.92
7"	1/4"	7/8"	8,500	TM0164315	27.92	25.14
9"	1/4"	5/8"	6,650	TM0187153	41.89	37.71
9"	1/4"	5/8"-11	6,650	TM0187449	22.74	20.52
9"	1/4"	5/8"-11	6,650	TM0187452	20.10	18.03
9"	1/4"	7/8"	6,650	TM0164316	38.51	34.66

95

CGW 3-in-1 Cut-Grind-Finish De- pressed Center Wheels - Type 27

- Cuts quickly, grinds easily and finishes work surfaces
- Contaminant free: less than 0.1 percent iron, sulfur or chlorine
- Fiberglass net reinforcement provides added strength and flexibility
- Ideal for stainless steel and a wide variety of metals and cutting metal profiles and thin pipes, and removing weld slag
- Use instead of a flap disc to complete the job with an excellent finish



Diameter	Arbor Hole	Width	Grit	Maximum RPM	Order No.	Regular Price	SALE
4 1/2"	7/8"	3/32"	36	13,300	MG9045218	4.23	3.75
4 1/2"	5/8"-11	3/32"	36	13,300	MG9045219	8.11	7.30
5"	7/8"	3/32"	36	12,250	MG9045220	5.11	4.63
5"	5/8"-11	3/32"	36	12,250	MG9045221	9.17	8.24
6"	7/8"	3/32"	36	10,200	MG9045222	7.53	6.74
6"	5/8"-11	3/32"	36	10,200	MG9045223	11.44	10.30

187

ABRASIVES



Mini Flap Discs

- Plate steel/structural steel
- Civil/construction/military equipment
- Propane tanks
- Farm equipment
- Strong zirconia alumina plus abrasive delivers aggressive cut rate and up to 30% longer life on mild carbon steel welds
- Semi-open coat retards loading on aluminum



		TR			TS		
Diameter	Grit	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
2"	P36 Grit	MH61D0290165	12.52	9.32	MH61D0290175	13.98	10.44
2"	P40 Grit	MH61D0290166	12.52	9.32	MH61D0290176	13.98	10.44
2"	P60 Grit	MH61D0290167	12.52	9.32	MH61D0290177	13.98	10.44
2"	P80 Grit	MH61D0290168	12.52	9.32	MH61D0290178	13.98	10.44
2"	P120 Grit	MH61D0290169	12.52	9.32	MH61D0290179	13.98	10.44

24124



BobCat® Quick Change 2 & 3"

Abrasive Flap Discs - Zirconia

- BobCat flap discs outperform conventional quick change discs at least 19 to 1
- Ideal for grinding, deburring and blending steel and stainless metal fabrication
- Applications include aggressive and rapid stock removal
- Angled style for maximum contact
- Flat style for smoother grinding and enhanced conformability



		Diameter - 2", Mount - R					
		Type 29			Type 27		
Grit	Maximum RPM	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
36	30,000	MK5150946	8.13	7.07	MK5150956	8.13	7.07
40	30,000	MK5150947	8.13	7.07	MK5150957	8.13	7.07
60	30,000	MK5150948	8.13	7.07	MK5150958	8.13	7.07
80	30,000	MK5150949	8.13	7.07	MK5150959	8.13	7.07
120	30,000	MK5150950	8.13	7.07	MK5150960	8.13	7.07

		Diameter - 3", Mount - S					
		Type 29			Type 27		
Grit	Maximum RPM	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
36	20,000	MK5150902	10.51	9.14	MK5150912	10.51	9.14
40	20,000	MK5150903	10.51	9.14	MK5150913	10.51	9.14
60	20,000	MK5150904	10.51	9.14	MK5150914	10.51	9.14
80	20,000	MK5150905	10.51	9.14	MK5150915	10.51	9.14
120	20,000	-	-	-	MK5150916	10.51	9.14

		Diameter - 3", Mount - R					
		Type 29			Type 27		
Grit	Maximum RPM	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
36	20,000	MK5150951	10.51	9.14	MK5150961	10.51	9.14
40	20,000	MK5150952	10.51	9.14	MK5150962	10.51	9.14
60	20,000	MK5150953	10.51	9.14	MK5150963	10.51	9.14
80	20,000	MK5150954	10.51	9.14	MK5150964	10.51	9.14
120	20,000	-	-	-	MK5150965	10.51	9.14

		Diameter - 2", Mount - S					
		Type 29			Type 27		
Grit	Maximum RPM	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
36	30,000	-	-	-	MK5150932	8.13	7.07
40	30,000	MK5150923	8.13	7.07	MK5150933	8.13	7.07
60	30,000	MK5150924	8.13	7.07	MK5150934	8.13	7.07
80	30,000	MK5150925	8.13	7.07	MK5150935	8.13	7.07
120	30,000	-	-	-	MK5150936	8.13	7.07

Drive Mandrel MK5107766

773



Single Point Diamond Dressing Tools

Features:

- Consistent diamond structure and shape for repeatable dressing performance
- Well defined diamond point
- Non-resettable



Model No	Shank Diameter	Shank Length	Maximum Compatible Wheel Diameter	Order No.	Regular Price	SALE
BC2M6	3/8"	2"	7"	MH63BC95000	116.03	92.80
BC2M7	7/16"	2"	7"	MH63BC95001	116.03	92.80
BC3M6	3/8"	2"	10"	MH63BC95002	128.94	103.16
BC3M7	7/16"	2"	10"	MH63BC95003	128.94	103.16
BC5M6	3/8"	2"	14"	MH63BC95004	153.59	122.92
BC5M7	7/16"	2"	14"	MH63BC95005	153.59	122.92

24162



Brake Controlled Truing Device

For Diamond and CBN Wheels

- Designed for truing diamond and CBN wheels rapidly and with minimum loss of diamond
- Ideal for straight wheels with diamond in the periphery, cut-off wheels, internal grinding wheels and cup wheels with diamond in the rim
- Easy to operate
- Rotate the truing wheel and make contact with diamond/CBN wheel
- Oscillate the unit and truing wheel across face of wheel being trued using machine cross-slide



Product Name	Order No.	Regular Price	SALE
3" x 1" Brake Controlled Truing Device Replacement Wheel	MG753100	29.50	19.61
For Use On: Diamond & Carbon Wheels - Brake Truing Device	NP55DT100	618.06	494.49

658



6" Diamond Cut Off Wheel

- 6 x .035 x 1-1/4 Type IAIR
- 1/4" Diamond section
- 100 Grit
- 100 Concentration
- Resin bond



Grit	Order No.	Regular Price	SALE
100	MP501807829	316.90	248.16

30943



Surface Conditioning

Quick Change Discs

- Ideal for blending, cleaning & deburring
- For both flat & contour applications
- Quick cutting action
- 2" - 50 pcs. per carton
- 3" - 25 pcs. per carton



		Surface Conditioning		
Diameter	Grade	Order No.	Regular Price	SALE
1-1/2"	CRS	MM6410550	1.97	1.62
2"	CRS	MM6410544	2.56	2.19
2"	MED	MM6410554	2.48	2.07
2"	VFN	MM6410546	2.48	2.07
3"	CRS	MM6410547	4.70	4.01
3"	MED	MM6410548	4.45	3.72
3"	VFN	MM6410549	4.45	3.72

2" Holder Roll-On MM59-64922 - Turn-On MM59-64198

3" Holder Roll-On MM59-64949 - Turn-On MM59-64113

10738



EZ Red Heavy Duty Strip Wheels

- Cleans welds and removes rust, paints, sealants and other clogging materials
- Can be used on stainless steel, steel, aluminum, titanium, non-ferrous metals, fiberglass, stone and wood
- Red: faster removal
- Black: cleans, and can provide a satin finish



Diameter	Color	Maximum RPM	Standard Pack	Order No.	Regular Price	SALE
4 1/2"	Black	11000	10	MG9059200	17.51	15.70
4 1/2"	Red	11000	10	MG9059204	19.43	17.45
4 1/2"	Black	11000	10	MG9059201	20.47	18.41
4 1/2"	Red	11000	10	MG9059205	22.50	20.20
7"	Black	7000	10	MG9059203	30.42	27.32

213



DEWALT 14" Abrasive Chop Saw with Quick Change™ Blade Change System

- Powerful 15 Amp/5.5 HP (maximum motor HP)
- QUICK-CHANGE™ blade change system providing the ability to change wheels without a wrench
- Exclusive QUICK-FENCE™ tool-free, 45° adjustable fence allows for fast and accurate angle cuts without using a wrench
- Quick-lock vise allows for fast clamping on different size materials
- Soft start extends gear and motor life by reducing start up torque
- Ergonomically designed "D" handle provides a more comfortable hand position, reducing fatigue
- Extra wide solid steel base provides increased stability when cutting longer material. Four pre-drilled holes in the base allow easy bolt down to any work bench
- Heavy-duty lock down pin allows head of the saw to be locked in the carrying position
- Large cutting capacity (5" round / 4-1/2" x 6-1/2" rectangle) provides the ability to cut a wide variety of materials



Order No.	Regular Price	SALE
PD20D28715	420.53	378.71

2078

DEWALT 20V MAX* Lithium Ion Premium 3-Speed Drill/Driver Kits

- Lithium Ion batteries offer longer tool run-time and enhanced durability
- Heavy-duty 1/2" metal ratcheting chuck with carbide inserts provide superior bit gripping strength
- High power, high efficiency motor delivers 535 unit watts out of max power for superior performance in all drilling and fastening applications
- 3-speed, all-metal transmission matches the tool to task for fastest application speed and improved run time
- LED light with 20-second delay after trigger release



Drill Capacity	Maximum RPM	Torque	Clutch Settings	Model No	Order No.	Regular Price	SALE
1/2"	535	535 inch/lbs	22	DCD985M2	PD20DCD985M2	597.41	537.53

23063

PRM PRO Chicago Pneumatic Precision Air Grinders with 1/8" Collet

- Designed for high speed hand grinding, deburring, drilling, polishing, burring and sanding
- An in-line filter and oiler should be used to provide adequate lubrication to the air motor
- Air Pressure must be kept below 85 lb/ in - High air pressure increases speed which causes damage to the wheels and grinder



BrandName	Maximum RPM	Order No.	Regular Price	SALE
Chicago Pneumatic	60,000	PF50CP9104QB	375.14	257.50
PRM Pro	54,000	PJ65TG11A	156.66	109.62

2316

PRM PRO Pneumatic Cut Off Tool & Right Angle Grinder Kit

Kit Includes:

- 1/4" Right angle die grinder
- 3" Cut-off tool
- 3 - Abrasive cut-off wheels
- 5 - Mounted points with 1/8" shank
- 5 - Mounted points with 1/4" shank
- 3 - Spanner wrenches
- 1 - Blow molded case
- 1 - Air fitting



Order No.	Regular Price	SALE
PJ752060	160.82	120.61

1960

Dynaflex® II Abrasive Belt Machine For 18" Long Belts

Model 40320

Grind, deburr, blend and polish, on metal, plastic, fiberglass, composites, rubber, glass and more.

- Includes 11206 Contact Arm for 3/4" W x 18" L abrasive belts
- Ideal for use with coated abrasive and non-woven nylon belts!
- Grind off contact wheel or platen pad. Finish & polish using slack of belt



Belt Length	Belt Width	Maximum RPM	Horsepower	Air Inlet Size	Order No.	Regular Price	SALE
18"	3/4"	20,000	0.50 hp	1/4" NPT	PF3040320	1,167.75	934.22

2166

'The Original' Dynaflex® Abrasive Belt Machine

Model 14000

- Belt housing has larger opening for belt tracking and operation
- Composite belt guard
- Lightweight, thermal-insulated composite motor housing reduces vibration and cold air transmission to operator
- Adjustable speed to 5,800 surface feet per minute
- Replaces tedious hand filing and sanding
- Work in areas as small as 3/8" diameter
- They Dynaflex accepts over 30 interchangeable contact arms

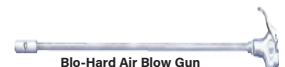


Belt Length	Belt Width	Maximum RPM	Horsepower	Air Inlet Size	Order No.	Regular Price	SALE
24"	1/2"	20,000	0.50 hp	1/4" NPT	PF3014000	1,187.06	949.64

2167

GUARDAIR Long Series Air Guns

- 1/4" NPT inlet
- Maximum operating pressure 120 PSI
- Ideal for reaching inaccessible or difficult to reach locations
- Meets OSHA standards
- Purolator dimensional weight shipping rates apply
- Blo-Hard Safety Air Gun - Model 900LJ** compact, thumb lever operated air gun fits comfortably in the palm of the hand
- Long John® Safety Air Gun - Model 75LJ** venturi tip increases thrust & limits static pressure to less than 30 psi when tip is blocked
- Whisper Jet® Air Gun - Model 80LJ** operates 6-20 dB quieter than conventional air guns



Extension Size	Long John®			Whisper Jet®			Blo-Hard Air Blow Gun		
	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
6"	LW5575LJ6	55.49	46.69	LW5580LJ6	60.25	50.73	LW55900LJ6	45.97	38.61
12"	LW5575LJ12	58.66	49.39	LW5580LJ12	63.41	53.28	LW55900LJ12	49.15	41.32
18"	LW5575LJ18	61.82	52.06	LW5580LJ18	66.59	55.97	LW55900LJ18	52.33	44.05
24"	LW5575LJ24	65.00	54.61	LW5580LJ24	69.76	58.68	LW55900LJ24	55.49	46.62
36"	LW5575LJ36	71.35	60.01	LW5580LJ36	76.10	64.06	LW55900LJ36	61.82	52.03
48"	LW5575LJ48	77.69	65.39	LW5580LJ48	82.43	69.30	LW55900LJ48	68.17	57.33
60"	LW5575LJ60	84.02	70.61	LW5580LJ60	88.79	74.67	LW55900LJ60	74.51	62.63
72"	LW5575LJ72	90.37	76.02	LW5580LJ72	95.12	80.06	LW55900LJ72	80.85	68.08

2218

POWER TOOLS

DEWALT metabo Milwaukee 4-1/2", 5" & 6" Angle Grinders



4 1/2"							
BrandName	Features	Maxi- mum RPM	Spindle Size	Amperage	Order No.	Regular Price	SALE
DeWALT	Dust ejection system, paddle switch with lock on button, auto-off brushes, 2 position side handle, one-touch guard	11,000	5/8"-11	11 A	PD20DWE402	212.13	190.96
DeWALT	2-Position removable side handle	12,000	5/8"-11	9 A	PD20DWE4120	188.54	169.70
DeWALT	Hex Wrench, Quick-Change™ Wheel Release, Slim ergonomic body design, One-Touch™ guard, Low profile, jam-pot gear, 2-position removable side handle, Depressed center wheel	12,000	5/8"-11	7 A	PD20DWE4011	161.00	145.02
DeWALT	One-Touch™ Guard, Low profile, jam-pot gear case, 2-position removable side handle, Quick-Change™ wheel release, Wrench	12,000	5/8"-11	9 A	PD20DWE4120N	188.54	169.70
Milwaukee	3-Position handle, paddle switch, spindle lock, all ball and roller bearing aluminum gear housing, double insulated 8 cord	10,000	5/8"-11	8.5 A	PD5061486	289.44	231.54
DeWALT	Low profile gear case allows for access into tighter spaces. One-Touch Guard allows for 360 degree rotation of the guard with a single action. Matching wheel flanges allow the use of common accessories. Quick-Change wheel release provides easier and quicker wheel removal without the need for a wrench. No Lock-On Paddle switch lock-off provides the user protection from accidental start up.	11,000	5/8"-11	11 A	PD20DWE402N	212.13	190.96

4 1/2" / 5"							
BrandName	Features	Maxi- mum RPM	Spindle Size	Am- per- age	Order No.	Regular Price	SALE
DeWALT	Anti-Rotation E-CLUTCH® System activates in less than a tenth of a second when a pinch/stall is detected, shutting down the motor. Power Loss Reset® prevents accidental restarts following a power disruption when the tool is left in the "on" position. Dust Ejection System provides durability by ejecting damaging dust and debris particles that enter through the air intake vents.	11,000	5/8"-11	13 A	PD20DWE43115	372.15	334.09
DeWALT	Dust Ejection System, E-Clutch™, Power Loss Reset®, Side handle, Inner and Outer Flange, Type27 Guard	11,000	5/8"-11	13 A	PD20DWE43114	353.58	318.71
DeWALT	Dust Ejection System, E-Clutch™, Power Loss Reset®, Side handle, Inner and Outer Flange, Type27 Guard	11,000	5/8"-11	13 A	PD20DWE43114N	353.58	318.71
DeWALT	Dust Ejection System, Side handle, Inner and Outer Flanges, Type 27 Guard	9,000	5/8"-11	13 A	PD20DWE43113	341.91	307.91

5" / 6"							
BrandName	Features	Maxi- mum RPM	Spindle Size	Am- per- age	Order No.	Regular Price	SALE
DeWALT	Dual Clutch Protection, Quick-Change™ wheel release, One-piece brush arm, Power-Off AdvancedOverload Protection, Vibration-reducing side handle, Auto-off brushes, No Lock on paddle switch,Dust ejection system, Dual abrasion protection, E-Clutch, Power-Loss Reset, Low profile, jam-potgear case, Keyless adjustable guard	9,000	5/8"-11	13 A	PD20D28144N	422.63	380.29

6"							
BrandName	Features	Maxi- mum RPM	Spindle Size	Am- per- age	Order No.	Regular Price	SALE
DeWALT	Power Loss Reset®, Dust Ejection System, Grinder, Side handle, Inner and outer flange, 6" Type27 Guard, 6" Type 1 Guard, 5" Type 27 Guard	9,000	5/8"-11	13 A	PD20DWE43066	418.98	377.23
Metabo	Metabo Long life motor, M-Quick system for tool free disc change, S-automatic torque limiting clutch, restart protection	9,600	5/8"-11	13.5 A	PD35WE15150	697.16	522.87
Metabo	Metabo Long life motor, Tacho-Constamatic full wave electronics, tool free disc change, electronic overload protection	9,600	5/8"-11	8 A	PD35WEPF9125	670.24	502.65
Metabo	Metabo Long life motor, Tacho-Constamatic full wave electronics, tool free disc change, electronic overload protection	9,600	5/8"-11	8 A	PD35WEPF9125	670.24	502.64

IR Ingersoll Rand 1/4 hp. Rt. Angle Grinder 301B

- Right-angle design fits into tight spots
- Powerful 1/4 HP motor
- Built-in lubricating wick increases angle gear life
- Safety-lock throttle is easy to use and prevents accidental startup
- Rear exhaust directs air away from the operator
- Includes 1/4in. collet, 6mm collet and wrenches



Type	Type of Power	Collet/ Chuck	Handle Type	Maximum RPM	Exhaust Type	Order No.	Regular Price	SALE
Air Die Grinder	Air	1/4"	Right Angle	21,000	Rear	PR55301B	203.32	150.24

30868

GUARDAIR CORPORATION Safety and Blind Hole Air Guns

- Ergonomic pistol grip and trigger eliminates hand fatigue
- 1/4" NPT inlet
- Maximum operating pressure 120 PSI
- Meets OSHA standards



Tip Type	Features	Model No	Order No.	Regular Price	SALE
Blind Hole	Delivers a high velocity jet of air into deep crevices & blind holes (down to 1/8" dia.) to flush out chips and dirt	74BH006Z	LW5574BH	59.46	50.06
Jet Guard	Safety air shield protects workers from hazardous chip fly-back	74SK	LW5574SK	57.07	48.02
Conical	Unique nozzle design reduces noise levels 6-20 dB less than conventional air guns	80WJ	LW5580WJ	52.33	44.07

1938

23269



Air Powered Grinders

- General maintenance applications
- Productivity and control ideal for moldings and general high-speed polishing and grinding
- Robust aluminum alloy body
- CP streamline safety lever Built-in air regulator
- Includes 1/4" and 6mm collets



PF50CP872



PF50CP875

Type	Features and Benefits	Maximum RPM	Average Air Consumption	Air Inlet Size	Order No.	Regular Price	SALE
Economy Die Grinder	22,000 RPM, 1/4" and 6mm collet, lock-off throttle, speed and power, precision control and safety, excellent tool for general high speed polishing and grinding	22,000	13 CFM	1/4" NPT	PF-50CP872	236.31	166.40
Right Angle	Mini angle grinder compact, lightweight design, 90° angle head allows flexibility in confined areas	22,500	11 CFM	1/4" NPT	PF-50CP875	231.91	159.01

28772



1.3 HP Right Angle Grinder

4-1/2" Diameter, 12,000 RPM

- For fast weld removal, rust and scale removal and heavy deburring
- Ideal for use with Type 27 grinding wheels

Specifications:

- Weight 4.5 lbs
- 1.3 HP @ 12,000 RPM
- 4-1/2" Diameter
- 5/8-11 Spindle
- Rear exhaust
- Hose size 3/8"



Order No.	Regular Price	SALE
PF3052632	1,390.34	1,112.28

2149



1HP 1/2 Pistol Grip Drill

- Design for high volume industrial production
- Advanced motor and clutch holds-up in the toughest working environments
- Chuck capacity of 1/2-inch and has free speed of 2600-rpm
- Ergonomic Rubber Grip offers increased operator comfort
- Power: 0.4 hp (0.30kW) - 1 hp (0.75kW)
- Speed Range 300 rpm - 23,000 rpm
- Chuck Capacity: 1/4" (6mm) - 1/2" (13mm)



Type	Average Air Consumption(New)	Drill Capacity	Chuck Style	Maximum RPM	Exhaust Type	Air Inlet Size	Chuck Size	ManufacturerNo	Order No.	Regular Price	SALE
Non-Reversing Drill	30 CFM	1/2"	Keyed	2,600	Handle	1/4" NPT	1/2"	SDR10P26N4	ST3717380	695.98	556.78

30609



1/3 hp. Rt. Angle Grinder 302B

- Right-angle design fits into tight spots
- Powerful 1/3 HP motor
- Built-in lubricating wick increases angle gear life
- Safety-lock throttle is easy to use and prevents accidental startup
- Rear exhaust directs air away from the operator
- Includes 1/4in. collet, 6mm collet and wrenches



Type	Type of Power	Collet/ Chuck	Handle Type	Maximum RPM	Exhaust Type	Order No.	Regular Price	SALE
Air Die Grinder	Air	1/4"	Right Angle	20,000	Rear	PR54302B	340.31	268.85

30889

PRM PRO Air Die Grinders

- Lever throttle for positive speed control
- Rear exhaust
- Rec. air pressure @ 90 PSI
- Collet size: 1/4"
- Collet wrenches included



Type	Features and Benefits	Maximum RPM	Average Air Consumption	Air Inlet Size	Order No.	Regular Price	SALE
Right Angle	Lever throttle for positive speed control, complete with collet wrenches	20,000	4 CFM	1/4" NPT	PJ60SM522	95.75	71.82
Straight	All ball bearing construction, lever throttle for positive speed control, complete with collet wrenches	22,000	4 CFM	1/4" NPT	PJ60DG1	56.53	42.42
Straight	Extended heavy duty spindle, lever type throttle	22,000	16 CFM	1/4" NPT	PJ60RG38A	185.15	138.81

22669



5" Dynorbital-Spirit™ Non Vacuum Random Orbital Sander

Model 59020

- Incorporates the latest engineering and manufacturing technology to create the lightest sander on the market today
- New 3-1/2" low profile design, improves control and offers greater operator visibility
- Easily replaceable drop-in motor

Specifications:

- Weight: 1.4 lbs, 75 dB(A)
- .25 HP @ 12,00 RPM
- 3/16" Diameter orbit
- Includes perfectly balanced weight-mated pad - the ultimate in swirl-free finishes



Disc Diameter	Type of Power	Air Inlet Size	Maximum RPM	Horsepower	Model No	Order No.	Regular Price	SALE
5"	Pneumatic	1/4" NPT	12,000	0.25 hp	59020	PF3359020	344.64	275.66

2180

MCR SAFETY BK1®

Non-slip temple sleeves
 Single wrap-around lens design with integral side shields

Lens Color	Lens Coating	Frame Color	Order No.	Regular Price	SALE
Clear	Uncoated	Clear	KB85BK010	3.12	2.40
Clear	Scratch Resistant	Clear	KB85BK110	3.33	2.57
Clear	Anti-Fog & Scratch Resistant	Clear	KB85BK110AF	4.48	3.45
Gray	Scratch Resistant	Gray	KB85BK112	3.33	2.57
Light Blue	Scratch Resistant	Light Blue	KB85BK113	4.20	3.24
Mirrored	Scratch Resistant	Clear	KB85BK119	4.20	3.24

2529

OTG Rimless Safety Glasses with Clear Temple, Clear Lens and Anti-Scratch Coating

- Polycarbonate unilens
- Over-the-glass design fits over all prescription eyewear
- Can also be worn by itself as a regular safety glass
- Molded nose bridge design to fit the vast majority of users
- Indirect vent temples to reduce fogging
- Meets ANSI Z87.1+ | Meets CSA Z94.3



Lens Color	Lens Coating	Frame Color	Order No.	Price	SALE
Clear	Anti-Scratch	Clear	PP1018765	3.18	2.21
Gray	Anti-Scratch	Gray	PP1018770	3.47	2.39
Clear	Uncoated	Clear	PP1018775	3.09	2.14

29821

Rimless Safety Glasses with Clear Temple, Clear Lens and Anti-Scratch / Anti-Fog Coating

- Lightweight, rimless design provides all day comfort
- Flexible bayonet temples contain rubber pads for a secure, non-slip fit
- Adjustable rubber nose piece provides a comfortable fit
- Meets ANSI Z87.1+ | Meets CSA Z94.3



Lens Color	Lens Coating	Frame Color	Order No.	Regular Price	SALE
Clear	Anti-Scratch / Anti-Reflective	Clear	PP1018000	14.15	9.82
Clear	Anti-Scratch / Anti-Fog	Clear	PP1018005	10.30	7.15
Gray	Anti-Scratch / Anti-Fog	Gray	PP1018010	10.30	7.15
Gradient	Anti-Scratch / Anti-Fog	Black	PP1018015	15.20	10.54
I/O Blue	Anti-Scratch / Anti-Fog	Translucent Brown	PP1018020	15.04	10.43
Clear	Anti-Scratch / FogLess 3Sixty	Clear	PP1018025	13.75	9.52
Gray	Anti-Scratch / FogLess 3Sixty	Gray	PP1018030	13.75	9.52

29826

Pyramex Safety Glasses

Alair

- Straight temples and integrated nose piece fits all facial sizes
- Superior scratch resistant frame and lens

Ztek

- Soft, non-slip rubber temple
- Integrated nose piece
- Scratch resistant



Alair



Ztek

Ztek				
Lens Color	Frame Color	Order No.	Regular Price	SALE
Clear	Clear	KB54S2510ST	6.68	4.97
Gray	Gray	KB54S2520S	5.92	4.52
Blue Mirror	Blue	KB54S2575	8.16	6.09

Alair				
Lens Color	Frame Color	Order No.	Regular Price	SALE
Clear	Clear	KB54S3210S	3.58	2.71
Gray	Gray	KB54S3220S	4.37	3.27
Light Blue	Blue	KB54S3260S	4.37	3.27
Mirror	Mirror	KB54S3280S	4.58	3.45

† Indoor or outdoorExceeds ANSI Z87 .1-2003 High Impact Requirements 24529

Rimless Safety Glasses with Black Temple, Clear Lens, Foam Padding and Anti-Scratch / Anti-Fog Coating

- Foam padding design forms a seal to keep out dust and airborne particles
- Lightweight, rimless design provides all day user comfort
- Thin, flexible temples provide a secure fit without uncomfortable pressure points
- 9.5 Base curve lens
- Meets ANSI Z87.1+



Lens Color	Lens Coating	Frame Color	Order No.	Regular Price	SALE
Clear	Anti-Scratch / Anti-Fog	Black	PP1017710	7.66	5.32

29824

Pyramex Cortez Safety Glasses

- General purposes for indoor applications that require impact protection
- Offers protection from excessive glare
- Scratch-resistant lenses
- Provides 99% protection from harmful UV-A and UV-B rays
- Ribbed cushioned nose piece fits a wide range of bridge sizes and protects against slippage
- Exceeds the ANSI Z87.1 high velocity impact standards



KB54SB3610S



KB54SO3610S

Lens Color	Frame Color	Order No.	Regular Price	SALE
Clear	Black	KB54SB3610S	6.51	4.83
Clear	Orange	KB54SO3610S	6.51	4.83

24521

3M 3M™ BX™ Protective Eyewear with Readers

- Clear choice for workers who have difficulty reading small print or who are engaged in small detail work
- BX protective reader eyewear features three magnifying diopters to choose from
- Lightweight, polycarbonate lenses with adjustable soft-tip temples, and a soft nose-bridge
- Curved lens side protection



Lens Color	Frame Color	Magnification	Order No.	Regular Price	SALE
Clear	Silver	1.5x	KB3511374	27.05	25.69
Clear	Silver	2.0x	KB3511375	27.05	25.69
Clear	Silver	2.5x	KB3511376	27.05	25.69

2391

Pyramex Capstone Shield for Welding or Grinding

- Removable shield provides full face protection
- Four ventilation holes provide appropriate airflow
- Polycarbonate high impact resistance shield conforms to the face offering increased impact & dust protection
- Fully adjustable elastic band
- Lense filters out more than 99.9% of harmful UV radiation
- Frame color: gray



Order No.	Regular Price	SALE
KB54GG504TS	55.82	41.79

24520

superdriwe Contender™ 18" Cut-resistant sleeves w/spark, heat and flame resistance protection

- Double-layer para-aramid provides heat-resistance and ANSI Level A3 cut protection
- Made with soft knit fabric
- 18" Sleeves provide a snug fit that conforms to your arm for stay-in-place comfort
- Strong resistance to sparks, flames, and heat
- Crafted with latex-free materials to limit the risk of allergic reactions
- Available with or without thumbholes



SG0255270



SG0255280

Style	Size	Cut Rating	ManufacturerNo	Order No.	Regular Price	SALE
without thumbhole	Large	ANSI A3	KAWC18	SG0255270	16.07	12.85
with thumbhole	Large	ANSI A3	KAWC18TH	SG0255280	17.33	13.90

30810



Professional Industrial Batteries

The Procell Difference

- World's first dual portfolio of professional batteries: by conducting intensive device testing and analysis, Procell has discovered that a way to dramatically extend alkaline battery life and cut replacement costs is to engineer device-specific industrial alkaline batteries, each with unique power profiles.
- Premium brand exclusively focused on the professional battery market.
- Deep understanding of professional devices and the battery category through device testing and analysis in our labs.
- Available in Alkaline and Lithium
- Standard power and Intense extra strength power available
- Sold in box qty. only



Procell

- Alkaline battery
- General purpose
- Reliable long lasting power
- Operating temperature -4° to 129.2°F

Procell Intense

- Alkaline battery
- For high drain devices
- Date coded
- Operating temperature -4° to 129.2°F

Procell Lithium Coin/Cell

- Lithium coin battery
- For compact professional devices
- Operating temperature -4° to 140°F

Procell High Power Lithium

- High power lithium battery
- General purpose
- Operating temperature -4° to 140°F

PROCELL					
Battery Size	Number of Batteries	ManufacturerNo	Order No.	Regular Price	SALE
AAA	24	4133353648	DU0310000	1.19	1.06
AA	24	4133352148	DU0310050	1.19	1.06
C	12	4133311440	DU0310070	2.88	2.53
D	12	4133311340	DU0310090	3.43	3.02
9V	12	4133352748	DU0310200	5.12	4.48

PROCELL INTENSE					
Battery Size	Number of Batteries	ManufacturerNo	Order No.	Regular Price	SALE
AA	24	4133303437	DU0350000	1.30	1.23
AAA	24	4133303715	DU0350005	1.41	1.19
C	12	4133303423	DU0350050	3.36	2.94
D	12	4133303424	DU0350070	3.79	3.31
9V	12	4133303716	DU0350080	5.17	4.48

PROCELL Lithium Coin/Cell					
Battery Size	Number of Batteries	ManufacturerNo	Order No.	Regular Price	SALE
3V	5	4133303459	DU0310405	12.45	11.81
3V	5	4133303458	DU0310410	12.45	11.81
3V	5	4133303457	DU0310415	12.45	11.81

PROCELL High Power Lithium					
Battery Size	Number of Batteries	ManufacturerNo	Order No.	Regular Price	SALE
3V	12	4133300438	DU0310420	8.01	6.55
3V	12	4133303456	DU0310425	8.01	6.55

29870

Dexterity® Micropore Nitrile Palm Coated Glove- Maximum Durability

- Micropore nitrile palm coating does not absorb fluids, so hands stay dry
- Fine-gauge nylon knit is soft, flexible and hard-wearing
- Craters act like tiny suction cups to improve grip in wet and oily conditions
- ANSI Level 6 Abrasion resistant
- ANSI Level 2 Puncture resistant



Size	Abrasion Rating	ManufacturerNo	Order No.	Regular Price	SALE
Small	ANSI Level 6	S15NAPN-7	SG0273725	6.30	5.08
Large	ANSI Level 6	S15NAPN-9	SG0273735	6.30	5.08
X-Large	ANSI Level 6	S15NAPN-10	SG0273740	6.30	5.08
2X-Large	ANSI Level 6	S15NAPN-11	SG0273745	6.30	5.08

30828



Endura® Stick/Arc welding gloves

- Select split cowhide for comfortable yet rugged service
- Continuous one-piece backs, leather welting in all vulnerable seams
- Full semi-sock thermal-knit cotton lining for comfort and added heat protection
- ANSI Level 2 heat protection
- Sewing thread is made with Kevlar® fiber for added seam integrity
- MIG WELDING, TIG WELDING



Size	Material	ManufacturerNo	Order No.	Regular Price	SALE
Large	Leather	505BU	SG0254180	22.37	17.89

30812



3120 Split Leather Driver Gloves

- Straight thumb
- Regular grade
- Slip-on cuffs
- Unlined styles
- Shirred elastic backs
- Color-coded hem to identify size



Size	Color	Material	Order No.	Regular Price	SALE
Small	White	Cowhide	KB513120S	9.32	7.04
Medium	White	Cowhide	KB513120M	9.32	7.04
Large	White	Cowhide	KB513120L	9.32	7.04
X-Large	White	Cowhide	KB513120XL	9.74	7.32

30778



Handheld Lighted Magnifier

- Mini (JMINI) is a small LED (11 bulbs) high power magnifier
- 2" Dia. lens made of distortion free glass
- Includes carrying case
- 50,000 hours of life for bulbs



KC50JMINI

KC50J203HHM

Magnification	Battery Size	Number of Batteries	Lamp Type	Order No.	Regular Price	SALE
2.5X	AAA	4	24 x 0.5W Hi Brightness LEDs	KC50J203HHM	118.24	112.28
2.5X	AAA	4	12 x 0.5W Hi Brightness LEDs	KC50JMINI	105.27	99.96

2549



4600 Blue Beast® Welder's

- Select heavy side leather
- Full sock lining, in-sewn at all finger tips
- All seams fully welted
- Turned leather hems
- Flame-resistant sleeves
- Extra-large die cut, gunn pattern
- Sewn with super-strong, heat-resistant DuPont™ Kevlar® thread



Size	Order No.	Regular Price	SALE
X-Large	KB514600XL	31.70	23.81
2X-Large	KB514600XXL	38.05	28.47

30708



Blow Guns

- Blow Guns 1/4 NTP Inlet unless otherwise noted
- Extended Reach Blow Gun
- 360° Rotating Extended Reach Nozzle with Rubber Tip



Tip Type	Order No.	Regular Price	SALE
Extension Reach	LX55AG2	40.24	32.13
Safety	LX55AG7	14.85	11.95

2239

SHOWA Atlas 451

- Quick drying
- Excellent wet & dry grip
- Breathable
- Good mechanical resistance
- Insulated, high warmth
- Ergonomic design
- Coating: natural rubber
- Liner: polyester/cotton/acrylic
- Color: light gray/gray palm



Size	Order No.	Regular Price	SALE
Small	SG2502730	7.21	5.74
Medium	SG2502735	7.21	5.74
Large	SG2502740	7.21	5.74
X-Large	SG2502745	7.21	5.74

30844

SHOWA 381

- Oil-resistant coating
- Exceptional grip in all conditions
- Maximum tactility and dexterity
- Extended-cuff for added protection
- Mimics the curvature of a human hand to reduce fatigue
- **Coating:** foam nitrile
- **Liner:** microfiber, nylon, 13-gauge
- **Color:** gray/black palm



Size	Order No.	Regular Price	SALE
Small	SG2502320	7.88	6.30
Medium	SG2502325	7.88	6.30
Large	SG2502330	7.88	6.30

30893

BAYCO Heavy Duty Cord Reels

50' Heavy-Duty Cord Reel Triple-Tap "T" Style

- 50' Heavy-duty 14/3 cord, (SJTW)
- Tri (3) Polarized plug with four 13 amp grounded receptacles
- 40% Larger cord reel with smooth glide rewind
- Resettable 13 amp circuit breaker
- LED power status light
- Mounting brackets (included)



Heavy-Duty Cord Reel 3-Tap Straight Plug

- 30' 16/3 Foot cord, (SJT)
- Polarized plug with three 10 amp grounded receptacles
- Heavy-duty metal retractable reel
- Brackets for wall or ceiling mounting (included)
- LED power status light

Cord/Cable Length	Order No.	Regular Price	SALE
30 feet	KE58SL800	137.14	109.78
50 feet	KE58SL8903	368.35	294.65

22769

W70062 Thermal Leather Driver

- Economy fleece lined grain cowhide driver
- Keystone thumb
- Fabric bound hem



Size	Order No.	Regular Price	SALE
Small	LW0110515	15.05	12.74
Medium	LW0110520	15.05	12.74
Large	LW0110525	15.05	12.74
X-Large	LW0110530	16.09	13.72

30891

N-Ferno® Warming Series Head & Face Cold Weather Protection

N-Ferno® Winter Liner 6850/6852

Econo 2-Layer Poly/Fleece

- Regular (6850)/ Shoulder (6852)
- Length
- Shell: 100% polyester with PU coating
- Lining: 100% poly fleece
- Hook & loop or chin strap
- Elastic gap control
- Water repellent



N-Ferno® Winter Liner 6821 Balaclava

- Long length
- Single wash FR treated
- Polyester fleece

Style	Order No.	Regular Price	SALE
N-Ferno Fleece Balaclava	LF656821	12.33	9.25
2-Layer	LF656850	13.62	10.24
2-Layer	LF656852	20.40	15.34

23167

N-Ferno® 6823 Wind-Proof Hinged Balaclava

- Fleece with wind-protectant fabric at the most vulnerable places protects against a variety of elements
- Unique hinged design
- 3-panel construction with flat lock stitching for a comfortable "just made for you" fit
- Reflective accents to help keep you safe and seen
- Long length



Order No.	Regular Price	SALE
LF656823	31.79	23.82

2606

ISOtunes ISO Pro Aware Earplugs

- Aware Technology™ offers complete situational awareness and protection from harmful noises.
- ANSI-certified 25 dB NRR
- OSHA-compliant hearing protection
- SafeMax™ Technology limits volume output to 85dB.
- Up to 13 hours of battery life
- Up to 25 additional hours with charging case
- IP67 durability for dust, sweat, and waterproof protection
- Background noise-reducing microphone for clear communication in loud environments
- Bluetooth 5.2 connects devices up to 30 feet.
- Siri/Google Voice Compatible
- Automatic Power Off after 2 hours without Bluetooth connection for battery conservation
- True Wireless Design



Noise Reduction Rating	Style	Color	Order No.	Regular Price	SALE
ANSI-certified 25 dB NRR	Uncorded	Lime/Black	HT015015	288.39	259.56

30836

ISOtunes ISO Link Aware Ear Muffs Green

- Aware Technology™ offers complete situational awareness and protection from harmful noises.
- ANSI-certified 25 dB NRR
- OSHA-compliant hearing protection
- SafeMax™ Technology limits volume output to 85dB.
- Up to 11 hour rechargeable battery life
- AAA battery compatible for up to 22 hours of connection (not included)
- IPX4 Durability for sweat and water resistance.
- Noise-Isolating Microphone for clear communication in loud environments
- Bluetooth 4.2 connects, and dual-connects, devices up to 30 feet.
- Siri/Google Voice Compatible
- Automatic Power Off after 4 hours without Bluetooth connection for battery conservation
- Vented headband
- Memory foam ear cushions



Type	Noise Reduction Rating	Style	Color	Order No.	Regular Price	SALE
Ear Muff	ANSI-certified 25 dB NRR	Ear Muff	Lime/Black	HT015034	201.87	181.72

30837



Disposable Earplugs

- Taper fit made of polyurethane material
- Plug gently expands and self adjusts to all size ear canals
- NRR: 31dB
- Priced per box



Style	Standard Pack	Order No.	Regular Price	SALE
Disposable / Uncorded	200	KB54DP1000	59.95	44.95
Disposable / Corded	100	KB54DP1001	59.95	44.95

*All styles meet ANSI S3.19 Specifications

24522

3M Disposable Earplugs

- Soft foam seals the ear canal comfortably
- Fits wide range of ear canal sizes
- Can be used with personal protective equipment
- Available in corded or uncorded
- Sold per pack priced per each



Noise Reduction Rating	Standard Pack	Order No.	Regular Price	SALE
29 dB	200	KB351100	0.25	0.23
33 dB	200	KB3511033	0.46	0.42
33 dB	200	KB3512063	0.27	0.23

Price Per Each Sold By Box

22583

3M 3M™ Super 77™ Multi-Purpose Spray Adhesive

- High tack, high coverage and fast drying
- Use for permanently attaching foils, carpeting, lightweight foams, paper, cardboard, felt and cloth to painted or unpainted metals, wood and hardboard
- Bonds quickly in 15 seconds



Container Size	Order No.	Regular Price	SALE
24 oz	LF53212109	30.27	28.70

22609

PRM PRO Class 2 Hi-Vis Safety Vests

- Class 2
- Reflective tape
- Zipper front closure
- SV80 radio straps both shoulders, 2 pockets with velcro closure and one chest pocket



	Yellow/Silver, Zipper			Yellow/Orange/Silver, Zipper		
Size	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
X-Large	KB38SV8040	20.30	16.18	KB38SV8110	20.30	16.29
2X-Large	KB38SV8045	20.30	16.18	KB38SV8115	20.30	16.18
3X-Large	KB38SV8050	20.30	16.18	KB38SV8120	20.30	16.29

2932

3M 3M™ Particulate Respirator 8210V, N95

- Proprietary 3M™ CoolFlow™ valve helps keep wearer cool
- Cushioning nose foam
- Adjustable noseclip helps provide a custom fit and secure seal
- Min. 10 per box



Order No.	Regular Price	SALE
KB3549711	2.60	2.50

2419

OIL-DRI Universal Bonded SMF Pads

- Treated chemically inert meltblown polypropylene
- Universal bonded pads are extra durable to handle non-aggressive leaks and spills in high-traffic areas, tool cribs and routine industrial applications
- Bonded layers build strength and allow fluid to spread quickly through the material



Width	Length	Standard Pack	Weight	Order No.	Regular Price	SALE
15"	19"	100	13 lbs	LD60L91001	131.17	91.84
15"	19"	100	17 lbs	LD60L90902	179.75	125.86
16"	20"	50	9 lbs	LD60L90907	99.46	69.58

24219

3M 3M™ Peltor™ Optime™ 101, Helmet Attachable

- Liquid/foam filled ear cushions
- For noise levels to 101dBA
- Easily attaches to fit most helmets & caps
- RoHS Compliant: NA
- Color: green



Noise Reduction Rating	Order No.	Regular Price	SALE
24 dB	KB35H7P3E	44.38	42.11

2422

Kimberly-Clark Professional WYPALL X80

- Designed to feel like cloth and work even better
- Our thickest and strongest wiper
- Absorbs faster than rags and shop towels



LM5541043



LM5505930



LM5541041

Container Type	Length	Width	Sheets Per Package	Weight	Order No.	Regular Price	SALE
Pop Up Box	16.8"	9.1"	80	12.4 lbs	LM5505930	42.66	31.86
Brag Box	16.8"	12 1/2"	160	6.3 lbs	LM5541041	85.03	63.53
Jumbo Roll	13.4"	12 1/2"	475	14.0 lbs	LM5541043	190.49	142.46

2737



Koehler BrightStar Vision 600 Rechg Lighthawk

Model No. 07712

- **Bulb:** LED
- **Lumens:** 600
- **Run time:** 6.25 Hours
- **Size:** 9.5 x 3.12 x 5.12"
- **Batteries:** Lithium ion battery pack (rechargeable), 120V AC charger
- **Features:** Wall/vehicle mountable, microprocessor controlled, super tough nylon construction, LED charge status indicator, non-slip rubber bottom and handle, low battery indicator, high visibility flashing LED tail light. waterproof, floats, weighs 1.9 lbs.



Order No.	Regular Price	SALE
KN0107712	499.10	449.19

2748

Koehler BrightStar Intrinsically safe Spot/Flood Headlamp

Model No. 200501

- **Bulb:** LED
- **Run time:** up to 20 hours spotlight / up to 140 hours floodlight
- **Spotlight lumens:** 65/185
- **Floodlight lumens:** 10/20
- **Batteries:** 3 AAA batteries (not included)
- **Features:** 4 light modes, large push button switch, lightweight polymer housing design, adjustable mount for greater vision, multi-use adjustable strap securely adheres to helmets, hardhats and heads, rated water-resistant design suitable for outdoor use in wet environment



Order No.	Regular Price	SALE
KN01200501	61.98	55.79

2749

Koehler BrightStar Freakin' Beacon™ Flasher

- 5 COLORS: Red, Blue, Amber, White and Green
- Green color runs 36 hrs. on steady, 144 hrs. on flash.
- Blue color runs 48 hrs. on steady, 192 hrs. on flash.
- Red, Amber, White colors run on 65 hrs. on steady, 200 hrs. on flash.
- Uses 2 AAA batteries (not included)
- Class I, Div 1
- Waterproof IP67
- 3M Dual Lock included
- Light visible from 1000+ feet
- Drop rated to 2 meters
- Optional helmet band for metal, plastic and spring clips
- Limited Lifetime warranty
- LENGTH: 2.7" WIDTH: 2.6" HEIGHT: 1.5"



			Metal Clasp			Plastic Spring			Plastic Solid			Magnet		
LED Color	Lumens Range	Battery Size	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
Amber	25/strobe	AAA	KN0171000A	69.20	62.30	KN0171010A	69.20	62.30	KN0171020A	69.20	62.30	KN0171030A	69.20	62.30
Blue	25/strobe	AAA	KN0171000B	69.20	62.30	KN0171010B	69.20	62.30	KN0171020B	69.20	62.30	KN0171030B	69.20	62.30
Green	25/strobe	AAA	KN0171000G	69.20	62.30	KN0171010G	69.20	62.30	KN0171020G	69.20	62.30	KN0171030G	69.20	62.30
Red	25/strobe	AAA	KN0171000R	69.20	62.30	KN0171010R	69.20	62.30	KN0171020R	69.20	62.30	KN0171030R	69.20	62.30
White	25/strobe	AAA	KN0171000W	69.20	62.30	KN0171010W	69.20	62.30	KN0171020W	69.20	62.30	KN0171030W	69.20	62.30

29684

PRM PRO Drum Dolly-Non-Marring Caster Wheels

- For 55 Gal drums
- Wheels are designed to protect floor from marring or scratching



For Use With	Drum Capacity	Order No.	Regular Price	SALE
55 Gallon Drums	1,500 lbs	PR05DLO55M	310.03	248.08

30841

STREMLIGHT Stylus® LED Penlights

- Style, convenience and a 100,000-hour bulb
- **Bulb:** high intensity 5mm LED, 11 lumens
- **Run time:** max. up to 60 hours of continuous use
- **Body:** anodized machined aluminum housing
- **Battery:** 3-AAAA (included)
- **Size:** 6-1/4"
- **Features:** non-slip grip, waterproof, individually serialized, pocket clip, and glare guard protector



LED Color	Order No.	Regular Price	SALE
White	KA5765018	49.99	35.04
Blue	KA5765022	49.99	35.04

25101



MAYHEW Punch & Chisel Sets

- Pin Punch Set - 45RC: 5 punches, 1/8, 5/32, 3/16, 1/4, 5/16"
- Cold Chisel Set - 15RC: 1/4, 5/16, 3/8, 1/2, 5/8, 3/4"

Punch & Chisel Set - 14RC

- 3/8" Center punch
- 1/8, 5/32, 3/16 & 7/32" Solid punches
- 1/8, 5/32, 13/64 & 3/16" Pin punches
- 7/16, 5/8, 3/4 & 7/8" Solid chisels
- 3/8" Prick punch

All Sets Feature:

- High-grade S-2 steel for superior tensile strength and toughness
- Full shank heat treating
- Black oxide finish
- Supplied in vinyl pouch
- Lifetime warranty



Number of Pieces	Type	Sizes Included	Case	Model No	Order No.	Regular Price	SALE
5	Pin Punch Set	1/8 x 4-3/4, 5/32 x 5, 3/16 x 5-1/4, 1/4 x 5-3/4, 5/16 x 6	Vinyl Pouch	-	KS5045RC	60.79	48.69
6	Chisel Set	1/4" x 5"; 5/16" x 5"; 3/8" x 5 1/2"; 1/2" x 6"; 5/8" x 6 1/2"; 3/4" x 7"	Vinyl Pouch	60560	KS5015RC	106.61	85.24
14	Punch & Chisel Set	1/4" x 5"; 3/8" x 5 1/2"; 1/2" x 6"; 5/8" x 6 1/2"; 3/4" x 7"	Vinyl Pouch	14RC	KS5014RC	210.50	168.37

30676

KLEIN TOOLS 14 Pc. Journeyman Apprentice Tool Set

- This 14-Piece tool kit gives the trade apprentice a solid foundation of tools to begin their career
- The set includes four sets of pliers, a wire stripper/cutter, two nut drivers, five screwdrivers and a nylon tool pouch and belt to carry them all on the job
- The screwdrivers and nut drivers feature Cushion-Grip handles for better torque and less fatigue
- A variety of tips and shaft lengths cover a wide array of tasks



Number of Pieces	Set Includes	Manufacturer No	Order No.	Regular Price	SALE
14	9" Journeyman Lineman's Pliers w/ Fish Tape Pulling (Cat. No. J2139NETP), 10" Journeyman Pump Pliers (Cat. No. J502-10), 8" Journeyman Long Nose Pliers (Cat. No. J2038), 8" Journeyman Diagonal-Cutters (Cat. No. J20048), Wire Stripper/Cutter (Cat. No. 11055), #1 Phillips Screwdriver, 3" (Cat. No. 603-3), #2 Phillips Screwdriver, 4" (Cat. No. 603-4), #2 Square Screwdriver, 4" (Cat. No. 662), 1/4" Cabinet-Tip Screwdriver 4" (Cat. No. 605-4), 3/16" Cabinet Tip Screwdriver 6" (Cat. No. 601-6), 1/4" Nut Driver (Cat. No. 630-1/4), 5/16" Nut Driver (Cat. No. 630-5/16), 12-Pocket Tool Pouch (Cat. No. 5720), Work Belt (Cat. No. 5705)	92914	KP6010825	607.80	511.22

28992

LANG 12 Pc. Combination Int/Ext Retaining Ring Pliers Set

- Includes 12 fixed tip pliers sizes .038, .047, .070, .090 in 0°, 45°, and 90° angles
- Pliers are convertible for use on internal and external snap rings with cushioned grip handles
- They have a knurled center screw with a spring for easy changing and secure hold



Order No.	Regular Price	SALE
KL403495	274.30	205.07

6819

wiha 11 Pc. Insulated Tool Set

A Must for SAFE Electrical Repair

- 1000 Volt Rated
- (1) - 8" Combination linemans pliers
- (1) - 6-1/2" Long nose pliers
- (1) - 8" Long nose pliers
- (1) - 6-1/2" Diagonal cutters
- (1) - 8" Heavy duty high leverage cutter
- (1) - Canvas tool bag (made in USA)
- 6 Pc. Insulated screwdriver set - phillips & slotted (made in Germany)
- Tested & approved for the following standards: VDE 0680-201, ASTM F1505-01, EN 60900



Order No.	Regular Price	SALE
KN5432977	382.89	287.21

While supplies last

28731

WILLIAMS 72 Pc. Tools Bits Set

Features:

- Industrial case is made from a highly durable, plastic material
- S2 material for higher torque, optimum durability and performance
- All parts are engineered and produced according to ANSI standard
- The set also includes a magnetic bit holder allowing for quick change of driving bits
- Folding case design is compact and robust with pivoting dual bit holders that allow for easy and quick access to the accessories



Set Includes	Order No.	Regular Price	SALE
Bits included: Hex, Phillips, Square, Slotted, Pozzi-Drive, Torx®, Nut Drivers, Magnetic Holder, Cones in 1 & 2" lengths	KP3024900	178.78	96.53

24984

KLEIN TOOLS 12 Pc. Tool Kit

- The Klein Tools 12-Piece Tool Set includes many of the vital tools needed for electrical wiring and connecting work
- Featured in this tool set are four Klein pliers
- These pliers have plastic-dipped handles for comfort and ease of identification
- Also included are four Cushion Grip Screwdrivers
- This set also comes with a handy work belt and a 18-pocket tool pouch



Number of Pieces	Set Includes	Manufacturer No	Order No.	Regular Price	SALE
12	9" Lineman's Pliers (Cat. No. D2139NETP), 8" Angled Head Pliers (Cat. No. D2489), 8" Long Nose Pliers (Cat. No. D2038), 10" Pump Pliers (Cat. No. D50210), 10 to 18 AWG Solid Wire Stripper (Cat. No. 11045), 7.5 M Tape Measure (Cat. No. 86375), #2 Phillips Screwdriver 4" Shank (Cat. No. 6034), 1/4" Cabinet Tip Screwdriver 4" Shank (Cat. No. 6054), #1 Square Recess Tip 4" Shank Screwdriver (Cat. No. 661), #2 Square Screwdriver 4" Shank (Cat. No. 662), 18 Pocket Electrician Tool Pouch (Cat. No. 5719), Web Work Belt (Cat. No. 5705)	92003	KP6010810	584.28	491.44

28990

CHAN NEL LOCK 3 Pc. Plier Sets

Tongue & Groove Set Includes:

- 6-1/2" Tongue & Groove (426)
- 9-1/2" Tongue & Groove (420)
- 12" Tongue & Groove (440)

Combo Set Includes:

- 7-1/2" Long Nose Plier (3017)
- 7" Cutting Plier (337)
- 10" Tongue & Groove (430)



LB50GS4

LB50GS3

Type	Order No.	Regular Price	SALE
Tongue and Groove Pliers Set	LB50GS3	98.06	73.43
Combo Pliers Set	LB50GS4	121.97	89.29

22933

OLFA Safety Carton Cutter

- A uniquely designed safety cutter
- Blade automatically self retracts when not in use
- Right or left hand use
- World famous genuine OLFA® blade is honed for maximum cutter performance



Order No.	Regular Price	SALE
FS6040062	21.13	14.32

24223

PROTO 38 Pc. Insert - Power Bit Set

- Contains: #1, #2, #3 phillips®, #1, #2 pozidrive, 4F-5R, 6F-8R, 8F-10R, 10F-12R, 12F-14R, 14F-16R slotted, T6, T7, T8, T9, T10, T15, T20, T25, T30, T40 torx, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16 socket head, #0, #1, #2, #3 square recess, 1/8, 5/32, 3/16 clutch, magnetic bit holder, power bit holder
- Magnetic tray to help keep pieces in place
- Not for use on impact applications



Model No	Order No.	Regular Price	SALE
J61906	KP4250865	243.64	207.10

7155

HAND TOOLS

Markal® Valve Action® Liquid Paint Marker

- Fast-drying, permanent paint for immediate handling reduces work downtime
- Dura-Nib medium bullet tip resists wear to provide long marking life
- Xylene-free paint reduces user health risks



Color	Order No.	Regular Price	SALE
White	LH5296820	5.12	3.96
Yellow	LH5296821	5.12	3.96
Red	LH5296822	5.12	3.96
Black	LH5296823	5.12	3.96
Orange	LH5296824	5.12	3.96
Blue	LH5296825	5.12	3.96
Green	LH5296826	5.12	3.96

23817

PRM PRO 2" & 3-1/2" Torx® Power Bits

- S2 modified steel with a Rockwell hardness between 58-62 HRC
- 1/4" Drive with exact fit machined tips
- Lifetime warranty against mfg defects



Overall Length - 2"				Overall Length - 3 1/4"			
Tip Size	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	
T5	KN7020100	2.66	1.93	-	-	-	
T6	KN7020105	2.66	1.93	KN7020160	3.42	2.60	
T7	KN7020110	2.66	1.93	KN7020165	3.42	2.60	
T8	KN7020115	2.28	1.76	KN7020170	3.05	2.32	
T9	KN7020120	2.28	1.76	KN7020175	3.05	2.32	
T10	KN7020125	2.28	1.76	KN7020180	3.05	2.26	
T15	KN7020130	2.28	1.76	KN7020185	3.05	2.26	
T20	KN7020135	2.28	1.76	KN7020190	3.05	2.26	
T25	KN7020140	2.28	1.76	KN7020195	3.05	2.26	
T27	KN7020145	2.28	1.76	-	-	-	
T30	KN7020150	2.28	1.76	KN7020200	3.05	2.26	
T40	KN7020155	2.28	1.76	-	-	-	

28703

Wiha® Slotted & Phillips Individual Insulated Screwdrivers

- Ergo molded insulated cushioned grips, 1000 volt rated
- Each tool individually tested to 10,000 volts for insulation integrity
- Handle & insulation molded on for maximum durability
- Exact fit precision machined tips
- Wiha special CRM-72 tool steel blades hardened & tempered
- All tools made by Wiha Germany



Slotted				
Tip Size	Overall Length	Order No.	Regular Price	SALE
3 mm	204 mm	KN5432012	9.93	7.47
3.5 mm	204 mm	KN5432015	10.58	7.88
4.5 mm	236 mm	KN5432024	12.82	9.66
6.5 mm	268 mm	KN5432039	17.81	13.32

Phillips				
Tip Size	Overall Length	Order No.	Regular Price	SALE
#1	7.5"	KN5432101	12.54	9.38
#2	8.6"	KN5432102	15.57	11.69
#3	10.6"	KN5432103	22.37	16.71

25517

Wiha® 1/4" Magnetic Bit Holder with Non-Slip Grip

- 1/4" x 125mm (5")
- Overall length 8.9"
- Safe, non-slip high torque grip
- Holds standard 1/4" insert bits



Order No.	Regular Price	SALE
KN5452650	33.22	24.87

7933

Wiha® Cushion Grip Screwdrivers TORX® Drivers

- Ergo molded on cushion grip for maximum torque - molded on handle for permanent bond
- Blades of Wiha exclusive CRM-72 tool steel
- Through hardened for maximum durability
- Precision machined exact fit TORX® tips
- Hard chromed surface finish for extreme wear



Tip Size	Order No.	Regular Price	SALE
T6	KN5436266	8.90	6.66
T7	KN5436268	8.67	6.52
T8	KN5436270	8.67	6.52
T9	KN5436272	9.63	7.19
T10	KN5436274	9.69	7.19
T15	KN5436276	10.44	7.88
T20	KN5436278	10.74	8.02
T25	KN5436280	12.77	9.52

25525

Spellmag® Transfer Punch Set

with Indexed Stand

- 28 Punch set consists of: (1) each of punch sizes 3/32" thru 1/2" x 64ths plus 17/32"



Order No.	Regular Price	SALE
KH50317	268.18	221.34

7673

Wiha® "MagicRing" L-Key Ball End Drivers

Screw Holding Hex Keys

- 9 Pc. Metric Set: 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0, 8.0, 10.0mm
- 13 Pc. Inch Set: .050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8"



KN5466991

KN5466990

Number of Pieces	Order No.	Regular Price	SALE
9	KN5466990	73.28	54.90
13	KN5466991	90.73	68.09

25513

Titan® 60 Lumen LED Mini Flashlight

- Bulb: 1 Watt Lux-C LED
- Lumens: 60
- Battery: 1 AA (included)
- Size: 3.4" long
- Features: Durable aluminum housing with water resistant seals. Push button switch



Order No.	Regular Price	SALE
KP8236016	42.78	29.93

3179

While Supplies Last

Titan® Adjustable Spud Wrenches

- Heavy duty drop forged steel
- Chrome plated to resist corrosion
- Precision machined surfaces



Overall Length	Order No.	Regular Price	SALE
10"	KP82211	57.13	40.04
15"	KP82216	84.81	59.43

7880

Williams® Hex, Torx® & Balldriver Socket Sets

- Polished chrome finish on a rail and clips
- Standard, metric and Torx®
- High polished chrome finish
- Bits are provided in black oxide finish
- Lifetime warranty



Drive Size	Set Includes	Type	Order No.	Regular Price	SALE
3/8"	4 mm, 5 mm, 6 mm, 7 mm, 8 mm, 9 mm, 10 mm-3/8" Drive - Metric Socket Set	Hex Drive Set	KP3031904	111.96	60.41
1/2"	8 mm-19 mm-1/2" Drive - Metric Hex Bit Socket Set	Hex Drive Set	KP3032904	176.29	95.25
1/4", 3/8", 1/2"	T25, T27, T30, T40, T45, T47, T50 Torx Bits	Torx Set	KP3031912	140.80	75.96
1/4", 3/8", 1/2"	T40, T45, T50, T55, T60-1/2" Drive - Socket Drive Torx Bit Set	Torx Set	KP3032908	142.02	76.69

22450

Williams® Ratchets

- Pear style operates as a 36-tooth action, with 4-1/2° arc swing
- Heat treated chrome plated vanadium steel
- Flex head features 180° swivel
- All ratchets are reversible
- Lifetime warranty



Drive Size	Overall Length	Head Style	Handle Type	COO	Order No.	Regular Price	SALE
3/4"	20"	Narrow Pear	Plain	China	KP30H51B	382.49	206.48
3/8"	9 3/4"	Narrow Pear	Smooth	USA	KP30B52EHFB	163.72	88.39

7598



Triple Pack (Ball & Torx®)

- 13 Pc. Fractional Ball L-Wrenches .050 to 3/8"
- 9 Pc. Metric Ball L-Wrenches 1.5mm to 10mm
- 8 Pc. Torx® Fold-Up T-6 to T-25



Order No.	Regular Price	SALE
KN5314132	96.64	55.93

22811

Young Bros. Heavy Duty Combination Stamps Sets

- 36 Characters: 27 Letters (A-Z), 9 (Numbers)



Character Size	Square Size	Overall Length	Weight	Order No.	Regular Price	SALE
1/32"	1/4"	2 3/8"	2 lbs	KF5000363	349.78	279.87
1/16"	1/4"	2 3/8"	2 lbs	KF5001363	276.72	221.35
3/32"	5/16"	2 1/2"	3 lbs	KF5002363	276.72	221.35
1/8"	5/16"	2 1/2"	3 lbs	KF5003363	276.72	221.35
5/32"	3/8"	2 3/4"	4 lbs	KF5004363	311.53	249.20
3/16"	3/8"	2 3/4"	4 lbs	KF5005363	328.20	262.51
1/4"	7/16"	3"	6 lbs	KF5006363	378.15	302.54
5/16"	1/2"	3"	8 lbs	KF5007363	473.17	378.57
3/8"	9/16"	3 1/8"	11 lbs	KF5008363	543.20	434.57
1/2"	3/4"	3 3/4"	28 lbs	KF5009363	864.57	691.61

8077



8" Ironworker's Diagonal Cutting Pliers

- Induction hardened cutting knives for long life
- Plastic dipped handles
- Tether not included
- Includes split ring for tethering plier while working at height
- High leverage design for greater cutting and gripping power



Overall Length	Jaw Width	Jaw Length	ManufacturerNo	Order No.	Regular Price	SALE
9"	1 3/16"	13/16"	D248-9ST	KP6011245	72.46	60.94

28841

Markal® PRO-LINE® HP Liquid Paint Marker for Oily Surfaces

- Unique paint formula resists spreading and dries quickly through oily surfaces to leave precise, permanent marks
- Durable metal barrel and nib reduce breakage for longer marking life.
- Xylene-free paint reduces user health risks



Color	Order No.	Regular Price	SALE
White	LH5296960	6.23	4.73
Yellow	LH5296961	6.23	4.73
Red	LH5296962	6.23	4.73
Black	LH5296963	6.23	4.73
Orange	LH5296964	6.23	4.73
Blue	LH5296965	6.23	4.73
Green	LH5296966	6.23	4.73
Silver	LH5296967	6.38	4.88

23816

PRM PRO Pinch Bars

- Line-up pry bars are used for moving and adjusting metal or wood
- Tapered on one side and flat on the other



Overall Length	Order No.	Regular Price	SALE
14"	LC715031	13.86	10.33
18"	LC717794	15.40	11.55
20"	LC715032	18.10	13.53
24"	LC717795	20.03	14.98

6947



Line-Up Pry Bar

- Long, tapered end for aligning and adjusting metal or wood
- Angled chisel end for extra leverage when prying
- Variety of lengths for work in hard-to-reach spots and more leverage
- Black oxide finish for additional rust protection



Thickness	Overall Length	Order No.	Regular Price	SALE
1/2"	14"	KS50468	36.40	29.12
5/8"	16"	KS50469	46.82	37.43
3/4"	20"	KS50471	59.02	47.26
3/4"	24"	KS50472	68.45	54.69
7/8"	30"	KS50473	93.88	75.12

6872

Markal® B® Paintstik® Multi-Purpose Permanent Solid Paint Crayon

- Real paint for long-lasting, highly visible marks
- Superior marking on rough, rusty, or dirty surfaces
- Solid paint marker eliminates replacement tips, sharpening or priming, increasing productivity



Color	Order No.	Regular Price	SALE
White	LH5280220	2.47	1.97
Yellow	LH5280221	2.47	1.97
Red	LH5280222	2.47	1.97
Black	LH5280223	2.47	1.97
Orange	LH5280224	2.47	1.97
Blue	LH5280225	2.47	1.97
Green	LH5280226	2.47	1.97

8478



6 Pc. Phillips® Screwdriver Set

Features:

- Comfort-grip handle with thumb stop allow for added turning power without discomfort or slippage
- Chrome blades prevent corrosion
- Blades are made from special alloy steel
- Vapor-blasted tips grip fasteners and prevent chipping, extending tool life
- Hex bolsters on shafts allow a wrench to be used for extra turning power



Order No.	Regular Price	SALE
KP30100P6PD	176.29	95.25

25003



Lineman's Crimping Pliers

- High-leverage design
- Induction hardened
- Smooth action and no handle wobble
- Streamlined design
- 5/8" Jaw thickness
- Crimping die behind hinge for superior leverage crimping of non-insulated connectors, lugs and terminals
- Unique handle tempering helps absorb the "snap" when cutting wire
- Precision-hardened plier head
- Plastic-dipped handles for comfort and ease of identification



Overall Length	Jaw Width	Jaw Length	Side Cutter	Handle Color	ManufacturerNo	Order No.	Regular Price	SALE
9"	1-1/4"	1-19/32"	High Leverage	Yellow	D213-9NE-CR	KP6011050	91.06	76.58
9 1/2"	1-1/4"	1-19/32"	HD High Leverage	Blue/Black	J2000-9NECR	KP6011065	142.59	119.98
9 1/2"	1-1/4"	1-19/32"	High Leverage	Yellow/Black	J213-9NECR	KP6011080	119.21	100.25

28923

PRM PRO Torx® Long Arm L Key

- Exact fit machined tips
- S2 modified steel through hardness for maximum durability
- Lifetime warranty against mfg defect

Torx Size	Blade Length	Order No.	Regular Price	SALE
T6	3.15"	KN7010206	3.08	2.31
T7	3.15"	KN7010207	3.08	2.31
T8	3.15"	KN7010208	2.81	2.17
T10	3.4"	KN7010210	2.28	1.65
T15	3.5"	KN7010215	2.38	1.72
T20	3.7"	KN7010220	2.51	1.94
T25	4"	KN7010225	2.69	2.03

6955



Torpedo Billet Level

- Level's patented magnet track prevents powerful rare earth magnets from falling out
- Large, easy-to-read high-visibility vials at 4 angles: level, 90, 45, and 30 degrees
- Large, top-view vial window enables easy readability from multiple angles
- High-visibility orange body is easy to see on conduit and at the jobsite
- V-Groove fits contour of conduit and pipe
- Tapered nose easily pushes into pockets



Model No	Order No.	Regular Price	SALE
935RB	KP6016175	61.66	51.90

30017



Dial Depth Gage

- Range: 0-22"
- Indicator resolution: .0005"
- Base length: 4"
- Includes 10 attachments (6 extension rods and 4 feeler points)
- Protective case included
- Procheck 1 Year Warranty



BrandName	Order No.	Regular Price	SALE
Fowler	NA5552125006	364.00	291.20
Procheck	PC21DG0221BDF†	135.73	101.78

† Black dial face

3749



0-16" IP54

Origin Mini Depth Gage

- Absolute encoding technology - memorize
- Origin zero position
- Includes 5 interchangeable depth rods, 1, 2, 3, 4 and 5", to extend the measuring depth to 16"
- 3-Reading functions: inch, metric & fractional
- Use as an indicator or depth gage
- Resolution: 0.0005" / .01mm / 1/128" indicator
- Travel: 1" Resolution: 0.0005" / .01mm / 1/128"
- Indicator travel: 1"
- 1 Year Warranty



Order No.	Regular Price	SALE
PC20EDG016IMFAB	81.12	60.90

4344



0 - 1" Pocket Depth Gage

- Same features as above except 1"/25mm range



Order No.	Regular Price	SALE
NA5554225000	53.20	45.22

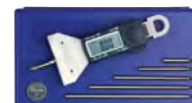
3756



Depth Gage

Inch/Metric/Fraction

- Spring loaded and hold measurement button for ease of use
- Super large display
- Range: 0-6" / 0-150mm
- Resolution: .0005"/0.01mm (fractions in 1/64" increments)
- Supplied in shop hardened case



Order No.	Regular Price	SALE
NA5554225555	138.60	117.81

3784



PREMIUM IP54 Electronic Digital

Micrometers

- Resolution: .00005"/0.001mm
- Absolute and incremental mode
- Ratchet thimble and spindle lock
- IP54 protection against water drops and dust
- Carbide measuring faces
- Ball attachment included
- Supplied with storage case
- Replacement battery: KA56ECR2032
- 1 Year Warranty



Measuring Range	Order No.	Regular Price	SALE
1"-2" / 25.4 mm-50.8 mm	PC20EM12505IP5	179.51	134.68
2"-3" / 50.8 mm-76.2 mm	PC20EM23755IP5	212.55	159.46
0"-1" / 0 mm-25.4 mm	PC20EM01255IP5	159.46	119.56
0"-3" / 0 mm-76.2 mm	PC20EM03755IP5	551.11	413.28

4628



PREMIUM Indicating Micrometers

- Insulated frame, and satin chrome finish
- Micro-fine graduations
- Carbide anvil & spindle
- Plain thimble
- Retracting button conveniently located to operators hand
- Includes case
- 1 Year Warranty



Minimum Measurement	Maximum Measurement	Order No.	Regular Price	SALE
0"	1"	PC21IDM01005	806.57	604.94

4640

Starrett® 436 Series Outside Micrometers

- .0001" Graduation
- Staggered lines and distinct, quick reading figures on sleeve
- Every thousandth numbered
- Black enamel finished frames
- Satin chrome finish on sleeve and thimble
- Spindle lock
- Carbide face



Order No.	Regular Price	SALE
MV7067997	260.00	265.80
MV7067999	263.00	269.65
MV7068005	316.00	323.75
MV7068007	328.00	335.17
MV7068013	393.00	401.95
MV7068015	405.00	414.49

4955



Fowler XTRA-VALUE Plus Electronic Caliper

Features:

- Range: 0 - 12" / 0 - 150mm
- Accuracy: $\pm 0.0015"/0.02$ mm
- Resolution: 0.0005"/0.01 mm
- Inch/Metric/Fraction reading: 0.0005"/0.01 mm/1/128"
- Dust, water and oil resistant to IP54 standards making it great for shop environments
- Heavy Duty frame for extra rigidity and wear
- Super large, easy to read 14 x 52mm display
- Combined thumbrest and thumbroll for fine adjustment



Order No.	Regular Price	SALE
NA55541030120	247.80	223.02

29364

Fowler Electronic Calipers

- Stainless steel frame
- Large easy-to-read display
- Resolution: .0005"/0.01mm
- Direct inch/metric conversion
- Absolute/incremental measurement
- 4 way measuring
- Complete in case



Measuring Range	Order No.	Regular Price	SALE
0-6" / 0-150 mm	NA55541011501	89.60	80.64
0-8" / 0-200 mm	NA5554101200	166.60	149.94
0-12" / 0-300 mm	NA55541013001	204.40	183.96
0-6" / 0-150 mm	NA55541016001	123.20	110.88
0-12" / 0-300 mm	NA55541019001	268.80	241.92

3781



Internal & External Electronic Caliper Gages

- Robust housing
- Large LCD display
- Reading: .01" / 0.1mm / 64ths
- Accuracy: .01" / 0.1mm / 64ths
- Spring loaded with locking nut
- Battery: CR2032 (included)



Type	Measuring Range	Order No.	Regular Price	SALE
Outside Caliper	0 - 6" / 0 - 150 mm	NA5554554630	98.00	83.30
Inside Caliper	0.5-6" / 150 mm	NA5554554730	98.00	83.30

3790

INSIZE Digital Outside Calipers

- Battery CR2032
- Data output
- Made of stainless steel
- Supplied with certification



Measuring Range	Resolution	Model No	Order No.	Regular Price	SALE
0-6" / 0-150 mm	0.0005" / 0.01 mm	1108-150	SZ201108150	114.52	103.06
0-8" / 0-200 mm	0.0005" / 0.01 mm	1108-200	SZ201108200	169.33	152.40
0-12" / 0-300 mm	0.0005" / 0.01 mm	1108-300	SZ201108300	253.99	228.59

3946

Mitutoyo Dial Calipers

- Smooth sliding
- Shock protection
- Lock screw on bezel
- 6" and 8" main beam coated with titanium nitride
- +/- .002" Accuracy



Measuring Range	Graduation	Range Per Revolution	Dial Face Color	Order No.	Regular Price	SALE
0-12"	0.001"	0.1"	White	MT80505-746	463.40	393.90

30938

PRO-CHECK ABSOLUTE 6" ABS Digital Caliper - Tube Type

- Absolute encoding technology - memorize
- Origin zero position
- Single frame depth base
- Data output port
- IP54 Protective rating
- Fitted case
- 1 Year Warranty



Order No.	Regular Price	SALE
PC20EC065TTAB	178.77	134.12

4402

PRO-CHECK ABSOLUTE Electronic Calipers with Output

- Absolute encoding technology memorize origin zero
- .0005"/0.01mm Resolution
- Data output port (PC26DCBL5PIN USB/SPC kit optional)
- IP54 protection against water drops and dust
- Inside & outside measures
- Hardened stainless steel with precision lapped finish
- Replacement battery: KA56ECR2032
- 1 Year Warranty



Measuring Range	Resolution	Inside Jaw Depth	Order No.	Regular Price	SALE
0-6" / 0-150 mm	0.0005" / 0.01mm	1-9/16"	PC20EC061505AB	134.18	100.66
0-8" / 0-200 mm	0.0005" / 0.01mm	1-15/16"	PC20EC082005AB	185.00	138.74
0-12" / 0-300 mm	0.0005" / 0.01 mm	2-1/2"	PC20EC123005AB	248.79	186.62

4430

PRO-CHECK Heavy Duty Dial Calipers

- Long range measurement of both outside and inside dimensions
- Covered rack
- Hardened stainless steel rack
- 1 Year Warranty



Measuring Range	Graduation	Inside Jaw Depth	Range Per Revolution	Dial Face Color	Order No.	Regular Price	SALE
18"	0.001"	3-1/8"	0.1"	White	PC21D-C18HD	405.78	304.36
24"	0.001"	4"	0.1"	White	PC21D-C24HD	445.44	334.04

4616



PRC CHECK PREMIUM 6" Electronic Caliper With Wireless Connect

IP67 Protection

- Inside & outside measures
- Hardened stainless steel with precision lapped finish
- Measuring Range: 0 - 6 / 0 - 150mm
- Resolution: .0005" / 0.01mm
- Replacement battery: KA56ECR2032
- 1 Year Warranty



Measuring Range	Caliper Type	Order No.	Regular Price	SALE
0-6" / 0-150 mm	Bluetooth	PC20EC06150516W	182.22	136.64

4637

PRC CHECK PREMIUM Stainless Steel Dial Calipers

- Covered rack for longer caliper life, keeps chips out
- Measuring face hardened stainless, ground and lapped
- Satin-chrome finish
- Complete with fitted case
- Certificate of Inspection included
- 1 Year Warranty



Measuring Range	Graduation	Order No.	Regular Price	SALE
0-6"	0.001"	PC21CDC6	115.98	86.98
0-6"	0.001"	PC21CDC6B	115.98	86.98
0-6"	0.001"	PC21CDC6CJ	210.62	157.96
0-6"	0.001"	PC21CDC6EM	123.07	92.30
0-150 mm	0.02 mm	PC21CDC6M1	123.07	92.30
0-6"/0-150mm	0.001" / 0.02 mm	PC21CDC6M2	163.32	122.50
0-8"	0.001"	PC21CDC8	116.77	87.58
0-12"	0.001"	PC21CDC12	169.09	126.82

†PC21CDC6EM Metric on scale only

4812

Starrett 0 - 6" Dial Calipers

Model No. 3202-6

- Quick, accurate measurement of OD, ID, depth and step
- Sharp, clear dial graduations of .001"
- Thumb-operated fine adjustment roll
- Sharp, black graduations on the satin finish bar
- Hardened stainless steel bar, measuring surfaces, rack, gears, and depth rod
- Positive, spring-loaded double pinion anti-backlash control



Measuring Range	Model No	Order No.	Regular Price	SALE
0-6"	3202-6	MV7061467	179.00	199.08

4945

FLUKE 179 Digital Multimeter

The Fluke 179 True-rms Digital Multimeter is the industry-standard troubleshooting tool for electrical and electronic systems.

This incredibly versatile multimeter makes a perfect front-line troubleshooting tool with an input protection rating of CAT III 1000 V, CAT IV 600 V. The built-in temperature measurement with the included thermocouple, analog bar graph and backlit digital display make it easier to take the measurements you need.

- Manual and automatic ranging
- Display hold and auto hold
- Frequency and capacitance measurements
- Resistance, continuity and diode measurements
- Temperature measurements (179)
- MIN/MAX/Average recording
- Closed case calibration through front panel
- Ergonomic case with integrated protective holster



Order No.	Regular Price	SALE
FL0612850	692.15	657.53

29876

FLUKE 115 True RMS Multimeter with Clamps

With its simple operation, compact design and ease of use, the Fluke 115 True RMS digital multimeter provides the perfect answer for general purpose electrical and electronic test requirements. The Fluke 115 displays True RMS voltage and current readings.

- Large white LED backlight to work in poorly lit areas
- Resistance and continuity
- Frequency and capacitance
- Maximum voltage AC/DC 600 V
- 10 A AC/DC current measurement (20 A overload for 30-seconds maximum)
- Min/Max And Average Recording With Display Hold
- Continuity Capture™ Records Opens/Shorts
- Diode Test



Order No.	Regular Price	SALE
FL0612805	385.00	365.75

29882

FLUKE 77 IV Digital Multimeter

The Fluke 77 IV digital multimeter has the features needed to repair most electrical and electronic problems. This meter is simple to use and has significant improvements over Fluke's original 70 Series with more measurement functions, conformance to the latest safety standards, and a much larger display that's easier to view.

- Large display
- Backlight for work in dim areas
- Ergonomic overmolded housing with integrated probe holders
- Free your hands with the optional TPAK magnetic hanger
- Auto and manual ranging
- Meets Measurement Category 1000 V CAT III and Category IV 600 V safety standards



Order No.	Regular Price	SALE
FL0612910	641.68	609.58

29885

FLUKE 2AC VoltAlert™ Electrical Tester

The Fluke 2AC is the latest addition to the VoltAlert™ AC non-contact voltage tester family. It is designed to be pocket-sized and easy to use. The tip of the pocket-sized tester will glow red when within close proximity of an outlet, terminal strip, or power cord where voltage is present.

- Voltage detection from 90 to 1000 V ac, suitable for a wide range of residential, commercial and industrial needs.
- New! always on, using special low power circuitry to sustain battery life and ensure your 2AC is always ready.
- Innovative 'battery check' button function ensures battery is in good condition*
- Category IV - 1000 V over voltage rated product for best in class user protection
- Expanded range: 90 V AC to 1000 V AC
- Integrated clip design, optimized for pocket storage
- Powered by 2x AAA batteries (included)
- Fluke ruggedness and reliability



Order No.	Regular Price	SALE
FL0712970	61.99	54.55

29890

FLUKE T5-1000 Voltage, Continuity and Current Tester

The T5-1000 is a versatile troubleshooting tool to carry to every job site. Use it to check voltage, continuity, and current with one compact tool. Just select volts, ohms, or current and the tester does the rest.

- Automatically measures volts AC and volts DC with precise digital resolution
- Displays resistance to 1000 Ω
- Easy and accurate OpenJaw™ current measurement
- 1000 V model
- Continuity beeper
- Rugged enough to withstand a 10 ft (3 m) drop
- Auto off mode to conserve battery life
- 2 year warranty



Order No.	Regular Price	SALE
FL0713135	288.39	273.96

29898



FLUKE 117 Electrician's Digital Multimeter with Non-Contact Voltage

The Fluke 117 Electrician's Multimeter is a compact, CAT III 600 V, True-rms meter that includes an easy-to-use interface with a bright backlight for darker worksites. It saves you time and enables you to move from job to job more quickly. With a quick turn of the dial you can get measurements for:

- VoltAlert™ technology for non-contact voltage detection
- AutoVolt automatic AC/DC voltage selection
- Compatible with optional magnetic hanger (ToolPak™) for hands free operation
- Measures 10 A (20 A overload for 30-seconds)
- Resistance, continuity, frequency and capacitance
- Low input impedance: helps prevent false readings due to ghost voltage
- Large white LED backlight to work in poorly lit areas
- 3 year warranty



Order No.	Regular Price	SALE
FL0612825	418.17	397.26

29884

KLEIN TOOLS Non-Contact Voltage Tester Pen with Infrared Thermometer

- Voltage Tester designed specifically for HVAC applications
- Volt Pen provides non-contact determination of AC voltage in cables, cords, circuit breakers, switches, outlets and wires, as well as AC voltage in security, entertainment, communications, environmental control, and irrigation systems
- Detects AC voltage from 12 to 1000V with visual and audible indicators
- 4:1 distance-to-spot ratio IR thermometer with user selectable Degrees Fahrenheit or Degrees Celsius from -22 to 482-Degree Fahrenheit (-30 to 250-Degree Celsius)
- Convenient laser pointer to target measurement area for temperature measurement
- Backlit LCD display with 0.1-Degree resolution
- Auto power-off conserves and extends battery life
- Screw-thread battery cap with O-ring ensures dust and water resistance
- Lightweight, compact tool with pocket clip provides easy storage and quick access



ManufacturerNo	Order No.	Regular Price	SALE
NCVT-4IR	KP6016125	112.98	95.01

30014

PRO-CHECK 5/16"-6" Telescoping Gage Sets

- Uniform contact pressure
- Self centering plungers
- Locks on any setting
- Rounded contacts
- Knurled knob on handle
- Available individually or in sets
- Bore size obtained by measuring over gage contacts with a micrometer



Style	Order No.	Regular Price	SALE
Economy	NN40290100	46.37	32.49
TiN Coated	PC24TSG6PST	105.25	79.00
Premium	PC24TSG6PS	89.12	66.89

4392

PRO-CHECK Combination Square Blades - 4R

- Hardened and tempered satin chrome ruler
- Graduated in 8ths, 16ths, 32nds and 64ths



Blade Size	Order No.	Regular Price	SALE
12"	PC23B124C	29.64	22.26
18"	PC23B184C	36.41	27.30
24"	PC23B244C	50.54	37.94

4507

PRO-CHECK PREMIUM Extended Range Dial Bore Gage Sets

- Extend range 1.4 to 6" (35mm to 160mm) range covers two of the most popular sets
- Easy to read dial face
- Insulated grip
- Carbide anvils and chrome plated handle
- Includes extension holder and fitted case
- 1 Year Warranty



Minimum Measurement	Maximum Measurement	Graduation	Depth	Number of Anvils/Rods	Number of Spacers	Order No.	Regular Price	SALE
1.4"	6"	0.0005"	6"	15	3	PC21DBG14065	286.52	214.90
35 mm	150 mm	0.01 mm	150 mm	16	3	PC21DBG35150M	286.52	214.90

4527

PRO-CHECK ABSOLUTE Extended Range Electronic Bore Gage Sets with Output

Bore Gage Set Features:

- Extended range 1.4 to 6" (35mm to 160mm) range covers two of the most popular sets
- Insulated grip
- Carbide anvils and chrome plated handle
- Includes extension holder and fitted case

Electronic Indicator Features:

- Bar graph and numeric digital display
- Preset with recall
- ABS/INC measurement
- 1 Year Warranty
- Min/max/TIR



Minimum Measurement	Maximum Measurement	Resolution	Depth	Number of Anvils	Number of Spacers	Order No.	Regular Price	SALE
1.4"	6"	0.00005" / 0.001 mm	6"	15	3	PC21EB-G14065EM	519.05	389.34

4428

Mitutoyo 6 Pc. Telescope Gage Set

- 5/16" to 6" Range
- Self centering plungers
- Knurled knob on handle
- Locks on any setting



Order No.	Regular Price	SALE
MT80155-903	334.47	275.50

4082

PRO-CHECK 12" Telescoping Gages

- Measure inside diameter
- Long handles for extra depth applications
- Spring loaded plunger expands within the bore
- Knurled clamp



Minimum Measurement	Maximum Measurement	Order No.	Regular Price	SALE
5/16"	1/2"	PC24TSG1P12	24.21	18.15
1/2"	3/4"	PC24TSG2P12	24.21	18.15
3/4"	1 1/4"	PC24TSG3P12	24.21	18.15
1 1/4"	2 1/8"	PC24TSG4P12	32.35	24.19
2 1/8"	3 1/2"	PC24TSG5P12	32.33	24.20
3 1/2"	6"	PC24TSG6P12	32.31	24.20

4368



PRO-CHECK PREMIUM Double Squares with 4R Chrome

- Blades: Heavy duty hardened, precision ground satin chrome
- Easy to read marked increments
- Made to US Standard Accuracy and Square-ness
- Comes with storage case with foam insert
- 1 Year Warranty



Blade Size	Fits	Order No.	Regular Price	SALE
4"	2-1/2" Base	PC23DS44	37.79	28.28
6"	3-3/4" Base	PC23DS64	59.49	44.66

4556

STANLEY 9" Extruded Torpedo Level

FEATURES & BENEFITS

- Magnified center block vial for durability and accuracy
- Extruded aluminum body for strength and light-weight
- Over-molded rubber end caps for non-marring leveling and shock resistance



Model No	Order No.	Regular Price	SALE
FMHT42437	KP444100	26.14	21.98

30067

PRO-CHECK Magnetic Dial Protractor

With Replaceable Center Punch

- Used to determine angles on machine setup or find and mark center of square or round stock
- 0 - 90°
- 4-Quad



Order No.	Regular Price	SALE
PC23MP490V	267.04	200.32

4692

PRO-CHECK PREMIUM 2 Pc. Combination Square Set

- Cast & ground square
- Hardened and tempered satin chrome ruler
- Graduated in 8ths, 16ths, 32nds and 64ths
- Protractor moves 180° in both directions
- Square / miter head features a level vial and a hardened scribe tool
- Fitted case included
- 1 Year Warranty



Order No.	Regular Price	SALE
PC23CS1224	86.55	64.96

4374

Starrett Exact® Plus Tape Measures

- Graduated in 16ths
- Wider blade providing a 9' stand out
- Nylon coated blade provides 6X abrasion resistance
- PC-ABS plastic case and heavy overmolding
- Positive lock holds blade firmly in place
- Black anodized steel belt clip



Blade Width	Blade Length	Model No	Order No.	Regular Price	SALE
1.06"	16'	KTXPI06-16N	MV8030636	39.23	36.89
1.06"	25'	KTXPI06-25N	MV8030638	54.16	50.96
1.06"	30'	KTXPI06-30N	MV8030641	64.73	60.84
1.06"	35'	KTXPI06-35N	MV8030645	72.98	68.71

5037

PRO-CHECK 10" Digital Protractor with Inch/Metric Scale

- 8" (10" on back) Stainless steel rule blade with inch and metric scales
- Reversible reading, hold function and locking feature
- Measure inside and outside angles
- Lightweight, easy to use
- Measuring range: 0-360°, resolution: .05°
- Accuracy: ±0.2°, repeatability: .05°
- Battery: 3V CR2032 battery included (replacement part number KA56ECR2032)
- 1 Year Warranty



Resolution	Accuracy	Order No.	Regular Price	SALE
0.05°	+/- .2°	PC23EP10EM	60.77	45.64

4358

PRO-CHECK Magnetic Dial Protractor with Punch

- Range: 360° (90° x 4)
- Resolution: 1°
- Magnet insert on both inside and bottom of the legs
- Hardened steel center punch
- Mark center of flat, square, or round stock
- 1 Year Warranty



Order No.	Regular Price	SALE
PC23MP490VO	133.08	99.82

4691

PRO-CHECK Mini Magnetic Level / Protractor

- 2-in-1 Digital level & protractor
- 4-Side measuring with magnets on 3 side
- Aluminum alloy body
- Large clear LCD display, reversible reading
- Measuring range: 4 x 90°, repeatability: 0.1°
- Resolution: .05°, accuracy: ± 0.2°
- Standard 9V battery included
- 1 Year Warranty



Type	Order No.	Regular Price	SALE
360° Electronic Protractor	PC23MLP360	103.82	77.84

4717

PRO-CHECK PREMIUM 4" & 6" Precision Double Square Set

- 4" 4R blade with 2.5" base
- 6" 4R blade with 3.75" base
- Blades: Heavy duty hardened, precision ground satin chrome blade
- Easy to read marked increments
- Made to US Standard Accuracy and Squareness
- Comes with storage case with foam insert
- 1 Year Warranty



Order No.	Regular Price	SALE
PC23DSS46	76.44	57.33

4744

Fowler 11 Pc. Precision Screwdriver Kit

- This precision screwdriver and tool set is ideal for miniature work
- Features knurled and chromed swiveling handles
- Screwdriver and tool set contains nine screwdrivers, one tapered point scratch awl and one magnetic pick-up tool
- Screwdriver size range: #00, #0, #1, 1/32, 3/64, 1/16, 5/64, 3/32 & 1/8"
- Includes magnetic pick up tool and scratch awl



Order No.	Regular Price	SALE
NA5552490003	50.40	45.27

23218



Starrett® Exact® Steel Blade Long Tapes

530 Series - Closed Reel

- Vinyl clad steel case
- Nylon rollers to reduce blade wear
- Easy to read 1/8" graduations
- Folding ring hook



Blade Width	Blade Length	Model No	Order No.	Regular Price	SALE
3/8"	50'	530-50	MV8065945	74.53	70.21
3/8"	100'	530-100	MV8065946	100.23	94.36

5035

Starrett® Little Giant Jack Screw Set S190Model

- Level work on plainer bed, drill press, mills ext.
- 1,000 Lb. capacity
- 20 Pitch screw for fine adjustment
- Complete with all accessories



Order No.	Regular Price	SALE
MV7050680	128.00	131.09

5071

GENERAL® Cordless Precision Engraver

- 20,000 RPM motor
- Engraves metal, glass, ceramic and plastic
- 3/32" Diamond tip bit included
- 2 AAA batteries included



Order No.	Regular Price	SALE
NE50505	36.08	28.93

6651

Starrett® Measure Stix™ Steel Measuring Tapes

Adhesive Backing

- Mount on work benches, saw tables, drafting tables, etc.



Blade Width	Blade Length	Order No.	Regular Price	SALE
1/2"	4'	MV8063168	15.47	14.61
1/2"	4'	MV8063171	16.51	15.59
1/2"	12'	MV8063170	22.85	21.43
3/4"	6'	MV8063169	19.02	17.94

5086

Starrett® Aluminum Straight Edge Rules

- English measure
- Flexible anodized aluminum
- 2" Width
- 1/8" and 1/16" Graduation



Length	Thickness	Model No	Order No.	Regular Price	SALE
24"	0.081"	ASE24	MV8036090	20.09	18.83
36"	0.081"	ASE36	MV8036091	20.79	19.65
48"	0.125"	ASE48	MV8036092	35.01	32.95
60"	0.125"	ASE60	MV8036093	40.00	37.63

4972

PRO-CHECK® LED 10X Optical Comparator

With 9 Reticles

- LED lighted scale magnifier with 9 reticles
- 7 Ultra bright LEDs
- Distortion free with 10X high resolution
- View area: 1-1/4"
- Reticle diameter: 34mm
- Includes fitted case
- 1 Year Warranty



Order No.	Regular Price	SALE
PC22L10XLED9PCS	246.33	184.80

4661

Mitutoyo® Radius Gage Sets



Number of Pieces	Minimum Radius	Maximum Radius	Order No.	Regular Price	SALE
8	9/32"	1/2"	MT80186-904	189.00	160.66
10	0.550"	1.000"	MT80186-907	903.00	767.55
17	1/64"	17/64"	MT80186-903	158.20	144.15
25	1/64"	1/2"	MT80186-901	267.40	227.26
26	0.010"	0.500"	MT80186-906	270.20	245.50

4204

TESA® Valueline Test Indicators

.030" Total Range

- Dial reading .0005"
- Graduations .0005"
- Black dial face



Dial Face Diameter	Model No	Order No.	Regular Price	SALE
1.26	01889018	MV4547439	193.20	173.81
1.54	01889023	MV4547440	193.20	173.81

3390

Fowler® Test Indicators and Sets

- Range: .060" (1.6mm metric)
- Dial reading: 0-15-0 (0-40-0 metric)
- Jeweled movement
- Revolution counter
- Easy-to-read tilted dial
- Automatic reversal
- 210° Swivel arc
- Tungsten carbide point .080" diameter

Set Includes:

- Dial test indicator
- Axial support
- Height gage bar with clamp
- Contact point case, contact point wrench
- Adaptor sleeve
- Complete in shop hardened case



Dial Test Indicator					
Graduation	Dial Face Diameter	Features	Indicator Style	Order No.	Regular Price SALE
0.0005"	1 1/2"	Indicator Only	Horizontal	NA5552562001	302.40 241.92
0.0005"	1.0"	Indicator Only	Horizontal	NA5552562002	302.40 241.89
0.0005"	1 1/2"	Indicator Only	Vertical	NA5552562004	254.80 203.84

Dial Test Indicator w/Accessories					
Graduation	Dial Face Diameter	Features	Indicator Style	Order No.	Regular Price SALE
0.0005"	1 1/2"	Indicator 52-562-001 with Accessories	Horizontal	NA5552562100	320.60 288.54
0.0005"	1.0"	Indicator 52-562-002 with Accessories	Horizontal	NA5552562110	320.60 288.54
0.001"	1.0"	Indicator 52-562-003 with Accessories	Horizontal	NA5552562120	355.60 319.98

3754



Mitutoyo Digimatic Indicator

575 Series - Model IDU

- Range: 0-1" / 0-25mm
- Display- .0005" / 0.01mm
- Easy to read LCD
- SPC output
- Slim design fits into tight spaces
- Battery powered for portability
- Functions include: in/mm conversion, zero-set and on/off
- Supplied with lifting lever
- Flat back only



Order No.	Regular Price	SALE
MT80575-123	322.00	278.50

23943

Mitutoyo Dial Test Indicator Precision Tool Kit

- Graduation: .0005"
- Range: .030"
- Dial reading: 0-15-0
- Jeweled bearings, anti-magnetic
- 3/8" Stem
- Accepts 3/8" or 5/32" holding stems, plus dovetail groove
- 150N Magnetic force



Order No.	Regular Price	SALE
MT80513-907-10E	355.60	302.28

4197

Mitutoyo Test Indicator with Ruby Stylus

- Wear characteristic improved by 50%
- Non magnetic and non conductive material enables use in EDM operations

Specifications:

- Graduation: .0005"
- Measuring range: .03"
- Accuracy: $\pm .0005$ "
- Measuring force: .07165" or less
- Contact point diameter: .79"
- Stem diameter: 3/8"



Order No.	Regular Price	SALE
MT80513-472-10E	239.40	203.47

4228

Starrett 25-441J AGD 2 Dial Indicator

- 1" Travel
- .001" Graduation
- 0-100 Reading
- Lug back
- Revolution counter
- 3/8" Diameter stem
- No. 2 Series



Order No.	Regular Price	SALE
MV7053295	277.00	283.57

4937

PRC CHECK Magnetic Bases & Electronic Indicator Sets

- 0-1" Digital indicator
- Resolution: .0005"/0.01mm
- Magnetic base with fine adjustment
- Protective case
- 1 Year Warranty



Order No.	Regular Price	SALE
PC20MBFA15EK	140.55	105.42
PC20MBFL15EK	173.84	130.34

4598

PRC CHECK

IP54 Dial Indicator - 1" Travel, .001" Graduation

Graduation

- IP54 protection, shockproof design
- Rubber bellow on stem and o-ring seal safety cap
- O-ring protection for bezel and dial
- Sealed back plate (lug back)
- Tolerance markers
- AGD Group 2
- Lug back and carbide point
- 1 Year Warranty



Range per Revolution	Dial Reading	Dial Face Diameter	Dial Color	Order No.	Regular Price	SALE
.100"	0-100	2-1/4	White	PC21D1211IP5P	75.81	56.84

4626

PRC CHECK

IP65 Test Indicators with Center Lock Quill Kit

- IP65 water and dust protective rating
- Jeweled movement
- Satin chrome finish body
- Anodized center lock arm with strong lock
- Fitted tool set case for easy storage
- 1 Year Warranty



Total Range	Graduation	Dial Reading	Dial Face Diameter	Order No.	Regular Price	SALE
.030	0.0005"	0-15-0	1 1/2"	PC21TIK0305IP6Q	192.82	144.62
.060	0.0005"	0-30-0	1 1/2"	PC21TIK0605IP6Q	285.17	213.92

4636

PRC CHECK PREMIUM

Long Range Dial Test Indicators - .060" Range

- .060" Long range travel
- Jeweled movement and easy-to-read, tilted dial
- Automatic reversal and revolution counter
- Tungsten carbide point capable of 210° Swivel arc
- Supplied with (1) each 5/32" and 3/8" dovetail stems and 3 carbide tip contact points, .040, .080, .120 diameter tip x 11/16" long
- Storage case supplied
- 1 Year Warranty



Graduation	Dial Face Diameter	Dial Color	Order No.	Regular Price	SALE
.0005"	1-1/2	White	PC21TI0601535W	201.24	150.92

4670

† Vertical model

PRC CHECK PREMIUM

Electronic Indicators with Output

- Absolute/incremental reading and floating zero
- Direct inch/metric conversion and auto-off feature
- Lug and, flat back, 3/8" stem diameter and carbide tipped point
- Tolerance indicators
- Optional USB data kit (PC26DCBS4PIN) available
- 1 Year Warranty



Total Range	Resolution	Indicator Style	Order No.	Regular Price	SALE
0 - 1" / 0 - 25mm	.0005" / 0.01mm	Drop Indicator	PC20EI1025005EM	108.42	81.34

4583

Starrett Tap Wrenches

- Highly finished tempered gripping surfaces
- Holds square or round shanks
- Plunger operated by knurled sleeve
- Spring inside sleeve causes plunger to back off when pressure removed



Size	Right Hand Thread Length	Order No.	Regular Price	SALE
1/16" to 1/4"	6"	MV7050419	97.00	99.47
3/16" to 1/2"	9"	MV7050420	134.00	137.36
1/4" to 5/8"	12"	MV7050421	218.00	223.00
5/16" to 3/4"	16"	MV7050422	294.00	301.14

10625



PRO-CHECK 36 Pc. Millionths Space Block Set

3/4" Diameter with 1/4-28 ID thread, ground, hardened and lapped. 4 Connecting screws included to form any length desired. Accuracy: $\pm .0002$ "

Consists of the following sizes:

- 9 Blocks - .101" thru .109" by .001"
- 15 Blocks - .050" thru .190" by .010"
- 9 Blocks - .200" thru 1.000" by .100"
- 1 Block - .0625"
- 1 Block - .125"
- 1 Block - 1.000"



Order No.	Regular Price	SALE
NF80PR1	114.00	79.85

4385

PRO-CHECK 1/8" Steel Parallel Set

Thin Styled, Matched Pairs - 10 Pair in Fitted Box

- Made of high grade alloy steel, hardened and ground from 1/8" stock
- Two holes in each parallel
- Accuracy: $\pm .0002$ " parallelism in height $\pm .001$ " to size in height



Order No.	Regular Price	SALE
NM55TPS11	166.33	116.49

4356

PRO-CHECK Tri-Block Sets

Premium 1-2-3 Block Set:

- Tolerance .0001" - .0003"
- Fitted plastic case

Economy Tri Blocks:

- Hardened 55 to 62 Hrc
- Tolerance .0003" to .0005" (0.005mm to 0.010mm for metric blocks)



Economy Tri Block					
Overall Width	Overall Length	Overall Height	Order No.	Regular Price	SALE
1"	2"	3"	NM52E123	33.60	23.50
25 mm	50 mm	75 mm	NM52E25M	56.57	39.57
2"	4"	6"	NM52PR246	338.42	236.96

Tri Block Set					
Overall Width	Overall Length	Overall Height	Order No.	Regular Price	SALE
1"	2"	3"	NM52PR123	77.15	54.01

4371

NOGA Dial Gage Holders with Power On/Off Magnetic Base

- Top clamp holds 3/8" stem and dovetail
- Fine adjustment
- Central locking mechanism with spring loaded bearing
- NOGA dial gage holder is 3-dimensional
- Most powerful on/off magnetic base



Bottom Arm Length	Top Arm Length	Pull Force	Style	Order No.	Regular Price	SALE
4.33"	3.98"	176 lbf	Standard	FN60DG10533	212.49	191.19
4.33"	3.98"	176 lbf	Standard	FN60DG61003	198.62	178.76
12.8"	9.50"	290 lbf	Super Long	FN60MA61003	406.43	365.73
5.26"	5.24"	176 lbf	Long	FN60MG10533	250.71	225.70
5.26"	5.24"	176 lbf	Long	FN60MG61003	249.41	224.42
6.43"	4.45"	180 lbf	Extra Long	FN60MG71003	277.10	249.39

4265



Replacement Magnetic Bases



Pull Force	Base Width	Base Length	Base Height	Order No.	Regular Price	SALE
190 lbf	2"	2 3/8"	2 3/16"	FN60DG0036	36.96	33.25
225 lbf	2"	3"	2 3/16"	FN60DG0038	69.29	62.35
290 lbf	2"	4 3/4"	2 3/16"	FN60DG0039	101.63	91.47

4288

PRO-CHECK Magnetic Bases

- Accepts all AGD dial indicators
- Permanent magnet (110 lb pull)
- On/off lever releases magnet
- Horizontal and vertical positioning capability
- Chrome rods and column
- V-Grooved base for mounting on cylindrical parts
- Accepts lug back groups 1, 2, 3 and 4
- Base size 2.36"L x 1.90"W x 2.00"H



Description	Order No.	Regular Price	SALE
Standard	PC21300	43.41	32.49
Fine Adjustment	PC21340	50.06	37.52

4569

PRO-CHECK Flexible Stem Magnetic Bases

- Stem flexes almost 360° and locks into position with cam lever-operated cable and tension adjustment
- Accepts all AGD indicators
- Permanent magnet (90 lb. pull)



Description	Order No.	Regular Price	SALE
Standard	PC21350	112.28	84.18
Fine Adjustment	PC21355	113.26	84.86

4604

Fowler Electronic Measuring Tool Kit

- 0-6" Electronic Caliper, 0-1" Electronic Micrometer, Shop-Hardened Case



Order No.	Regular Price	SALE
NA5554004850	351.40	323.28

29120



Mitutoyo Stem Mount Dial Test Indicators

- Jeweled bearings
- Reversible contact point
- Two holding bars are supplied. One (1/2" x 1/4") is used with lathe tool posts and height gages, the other (.315" dia.) with drill chucks
- Fully adjustable bezel/dial face
- Contact point is adjustable within 220°
- Complete with accessories and compact carrying case



Graduation	Dial Reading	Order No.	Regular Price	SALE
0.001"	0-20-0	MT80513-518T	239.40	203.47

Set includes: 5/32" & 3/8" stems and .080" point installed. Plus bar, clamp and point wrench. 4224

Fowler Fine Adjust Mag Base Set

With Indi-X Blue Electronic Indicator

Indi-X Blue Indicator Features:

- Direct inch/metric conversion
- 1"/25mm Travel
- Auto off feature
- 2-1/4" Dial face
- Lug back and 3/8" stem diameter
- Resolution .0005"/0.01mm
- Tolerance indicators
- Absolute/incremental reading
- Floating zero
- Carbide tipped point

Magnetic Base Features:

- 85lb pull
- Fine adjustment
- V-bottom base

Magnetic Indicator Back Features:

- Use for positioning the indicator on most metal surfaces
- Protective coating

All in a shop-hardened case



Order No.	Regular Price	SALE
NA5554585075	376.60	346.47

3640

Fowler Flex Arm Base & White Face Dial Indicator Combo

Indicator features:

- 1" Travel
- AGD 2
- 2-1/4" Dial diameter
- Reading: .001"
- Continuous reading: 0-100
- Revolution counter
- Tolerance indicators

Flex-Arm Mag Base features:

- 85lb pull
- Holds rigidly in any position desired
- V-base for placing on round surfaces
- On-off lever release magnet



Order No.	Regular Price	SALE
NA5552641300	210.00	189.00

3641

PROCHECK Central Lock Clamp with Indicator

- Anodized 7" universal clamp with fine adjustment magnetic base with on/off switch
- 0-1" Digital indicator
- Protective case
- 1 Year Warranty



Order No.	Regular Price	SALE
PC21CLMB7FA35K	187.42	140.56

4492

Starrett Drive Pin Punches

5505PC Model

- Hardened and highly polished and has a knurled grip
- Size of the punch is stamped on the head of each punch
- Set of 8 drive pin punches: 1/16" to 1/4" by 32nds plus 5/16" in attractive, protective case



Order No.	Regular Price	SALE
MV7052587	101.00	103.34

25046

PROCHECK Workshop Measuring Sets



Set Includes	Order No.	Regular Price	SALE
Sciber, 3" divider, 1/32"-5/8" bore gage, screw cutting gage, 4-42 & 0.25-6.0 mm screw pitch gage, 4"/100 mm brass caliper, automatic center punch, protractor/depth gage, 6"/150mm flexible rule, 4" steel square, storage box	NE6011PCMTS	127.93	89.60
2", 3", 4", & 6" Squares in storage box	NE604PCMTS	93.86	65.71
2", 4", & 6" Squares, 5" & 6" long scribers in storage box	NE606PCMTS	99.23	69.41

4881

Starrett Plain Tap Wrenches

- For holding taps, drills, reamers and small tools to be turned by hand
- Body is centered for use on lathe centers or drilling machines to start tap straight
- Jaws heat treated to with stand hard use
- All wrenches have sliding handle
- Bodies are longer on 2nd one listed for each size which permits work at depths which cannot be reached with shorter wrenches



Size	Right Hand Thread Length	Order No.	Regular Price	SALE
1/16" to 3/16"	2"	MV7050427	69.00	70.58
1/16" to 3/16"	6"	MV7050430	104.00	107.08
7/32" to 7/16"	2-1/2"	MV7050428	75.00	76.88
7/32" to 7/16"	10"	MV7050431	132.00	134.77
1/4" to 1/2"	3-1/2"	MV7050429	95.00	98.29
1/4" to 1/2"	13"	MV7050432	145.00	148.68

10624

Starrett 240 Series Pin Vises

- Smooth handle allows vise to be held in machine chucks or collets
- Hole through entire length to accommodate stock up to the full size capacity to end allows fast opening and closing
- All four vises have heavy nickel plated finish



Capacity	Style	Order No.	Regular Price	SALE
0.010"-0.055"	Single End	MV7051136	44.50	45.37
0.025"-0.075"	Single End	MV7051137	54.00	55.46
0.045"-0.135"	Single End	MV7051138	60.00	60.55
0.110"-0.200"	Single End	MV7051139	65.00	66.83
0.010"-0.200"	4 piece set in Protective Case	MV7051140	231.00	235.59

5088



General Purpose Tool Box with 3 Drawers

- 21 in General Purpose Toolbox, 3-Drawers
- Removable steel tote tray
- Heavy-duty side handles
- Padlock center feature hasp for security



Length	Width	Height	Depth	Model No	Order No.	Regular Price	SALE
18"	20 3/16"	11/34"	8 3/4"	J9993	KP4292125	284.68	156.57

5494

National Public SEATING Corp.

Kangaroo Stool

- Heavy duty 1-1/4" thick polyurethane seat with waterfall edge
- 10" of Kangaroo pneumatic height adjustment from 22"-32"
- Swivels 360° for unlimited functionality
- Integrated under seat spring system allows for control of backrest tilt
- Footrest adjusts 12" up or down for comfort
- Convenient backrest handhold for maneuverability



Order No.	Regular Price	SALE
RZ406722HB	686.39	514.79

5460

PRM PRO Mechanics Shop Stool Seat

- 14" Seat adjusts from 15-3/4" to 20"
- Cushion seat swivels 360°
- 2-1/2" diameter nonmarring nylon casters
- 300 lb maximum seat capacity
- Limited lifetime warranty
- Ships Purolator



Order No.	Regular Price	SALE
RZ453000	103.60	82.88

5480



CNC Tool Cart

- Constructed of prime 12 gauge steel for rugged heavy duty use
- New outrigger design for improved stability, easier maneuverability for a safe, smooth tool ride
- Heavy duty, extra smooth rolling casters load rated to 1600 lbs for long caster life, with locking caster mechanism
- Cart size 45-1/4 x 17-1/2 x 40"
- Ships by truck



Taper Size	Tool Capacity	Weight	Order No.	Regular Price	SALE
40	90	132 lbs	AP5323940	1,216.01	957.04
50	52	132 lbs	AP5323950	1,216.01	957.04
HSK 63A	52	132 lbs	AP5323970	1,418.07	1,116.08
HSK 100A	52	132 lbs	AP5323980	1,418.07	1,116.08

Ships by Common Carrier

5383

PRM PRO Shop Stool with Cushion Seat

- Vinyl black padded seat swivels 360°
- Chrome plated legs
- Seat diameter 13.7"
- Great for shop, warehouse, office, etc.
- Limited lifetime warranty against manufacturer defects
- Ships Purolator



Height	Order No.	Regular Price	SALE
29"	RZ456000	98.00	78.40

5481



CNC Security Cart

- Clear polycarbonate doors allow for easy at-a-glance tool identification
- Comes with 2 sets of doors to secure both sides
- Doors are keyed alike for easy operation and security
- Shelves can be adjusted in 7 different mounting positions
- Side tray allows for optional tool changing vise or collect racks
- Large open tray area for utility transport
- Size: 41 x 35 x 20"



Taper Size	Tool Capacity	Order No.	Regular Price	SALE
30	48	AP5316930	1,575.64	1,385.98
40	48	AP5316940	1,575.64	1,385.98
HSK 50A	36	AP5316950	1,575.64	1,385.98
HSK 63A	48	AP5316970	1,575.64	1,385.98
HSK 100A	36	AP5316980	1,575.64	1,385.98

Ships by common carrier

5361



ToolScoot™ Carts

- Durable nylon inserts to help prevent tool damage
- Two end storage trays with universal mounting holes for tool lock
- Solid, interlocking side panel construction adds strength and stability
- Heavy duty 5 x 1-1/4" casters load rated at 1000 lbs
- Angled lower tray for easy, quick tool access from either side
- All steel painted with durable Ecolo-Clad in red and black
- Purolator dimensional weight shipping rates apply



Taper Size	Tool Capacity	Weight	Order No.	Regular Price	SALE
HSK 63A	48	75	AP5313970	1,019.53	802.41
HSK 100A	36	79	AP5313980	1,019.53	802.41
30	48	75 lbs	AP5330HU	906.46	713.41
40	48	75 lbs	AP5340HU	906.46	713.41
50	36	75 lbs	AP5350HU	906.46	713.41

Ships by Truck

5392

KENNEDY 5-Drawer Roller Cabinets Models 275 & 295

- Tamper proof internal drawer locking system. Fully lockable.
- Comes with side handle
- Brown wrinkle or Industrial red

Model 275X Features:

- 27"W x 18"D x 35"H
- Comes with 5" x 2" casters
- 1400 lb capacity

Model 295 & 295X Features:

- 29"W x 20"D x 35"H
- Comes with 5" x 2" casters
- 1400 lb capacity



Width - 27", Depth - 18", Height - 35"			
Color	Order No.	Regular Price	SALE
Brown Wrinkle	RX50275XB	1,885.55	1,309.35
Red	RX50275XR	1,885.55	1,309.35

Width - 29", Depth - 20", Height - 35"			
Color	Order No.	Regular Price	SALE
Brown Wrinkle	RX50295XB	1,938.90	1,346.39
Red	RX50295XR	1,938.90	1,346.39

* Available while supplies last . • Ships by Truck

23603

MATERIAL HANDLING



STANLEY 4 Drawer Tool Chest & Roller Cabinet Combo

- Each unit sold separately
- 4" x 2" Casters Support 500 lbs.; two lock and swivel
- Gas Struts Support the Chest Lid to easily open and close
- Keyed Internal Locking System safeguards tools
- Recessed Side Handles on tool chest allow for easy lifting
- Non-Slip Open Weave Top Mat protects the cabinet surface
- Middle Chest Adds Storage between the tool chest and rolling cabinet
- Full-Width Black Steel Drawer Trim can be opened anywhere along the drawer
- 50 lb. Full-Extension Ball-Bearing Drawer Slides for smooth operation and ease of use



Tool Cabinet										
Number of Drawers	Drawer Type	Height	Width	Depth	Color	Drawers Sizes	Caster Diameter	Load Capacity	Manufacturer No	Order No.
4	Ball Bearing	32"	26.5"	18"	Black	(1) 22.125x16.5x4.125, (3) 22.125x16.5x6.375	4"	500 lbs	STST22742BK	KP436042
										593.26
										498.33

29387

DURHAM MFG Est. 1922 Sturdy All Steel Parts Bins

- Easy parts access
- Hemmed and ribbed dividers
- 1-1/8" Wide label holders
- Large capacity - all units are 12" deep and all bin openings are 11-7/8" deep
- Purolator dimensional weight shipping rates apply on SB5540B



Number of Bins	Height	Order No.	Regular Price	SALE
40	23 7/8"	SB5540B	334.88	271.46
72	42"	SB5572B	517.59	419.58

23115

Ships By Truck

STANLEY 26-1/2"W Tool Chest, Middle Chest & Roller Cabinets

- 14,404 Cubic Inches of Storage
- 4.5" x 1.5" Casters Support 650 lbs.; two lock and swivel
- Gas Struts Support the Chest Lid to easily open and close
- Keyed Internal Locking System safeguards tools
- Full-Grip Side Handle on Rolling Cabinet and Recessed Handles on tool chest for easy lifting and portability
- Non-Slip Open Weave Top Mat protects the cabinet surface
- Middle Chest Adds Storage between the tool chest and rolling cabinet
- Full-Width Aluminum Drawer Trim can be opened anywhere along the drawer
- White Carton with Full-Color Graphic Label on One Side
- 85 lb. Full-Extension Ball-Bearing Drawer Slides for smooth operation/ease of use



KP436030

Middle Tool Chest									
Number of Drawers	Drawer Type	Height	Width	Depth	Color	ManufacturerNo	Order No.	Regular Price	SALE
2	Ball Bearing	12.25"	26"	12"	Black	STST22623BK	KP436030	395.53	332.24

29394

Ships Common Carrier

Storage Bins

AkroBins Industrial Grade Polymers Storage Bins That Hang or Stack

- AkroBins hang securely from louvered panels
- Extra-wide stacking ledge assures secure stacking
- Anti-slide stop prevents loaded bins from shifting forward when stacked
- Large label slot for clear identification
- Reinforced ribs prevent bins from spreading when loaded
- Finger grips allow easy handling
- Available in: Blue, Red, Stone, Yellow.



Yellow										
Outside Length	Outside Width	Outside Height	Inside Length	Inside Width	Inside Height	Standard Pack	Use Dividers	Order No.	Regular Price	SALE
5 3/8"	4 1/8"	3"	4 3/4"	3 7/16"	2 13/16"	24	SD50-40210	SD5030210Y	3.56	2.67
7 3/8"	4 1/8"	3"	6 3/4"	3 7/16"	2 13/16"	24	SD50-40220	SD5030220Y	6.58	4.94
10 7/8"	5 1/2"	5"	10 1/4"	4 3/8"	4 3/4"	12	SD50-40230	SD5030230Y	16.00	11.99
10 7/8"	11"	5"	10 1/4"	10"	4 3/4"	6	SD50-40230	SD5030235Y	24.68	18.50
10 3/4"	8 1/4"	7"	10"	6 9/16"	6 3/4"	6	SD50-40239	SD5030239Y	26.46	19.85
14 3/4"	8 1/4"	7"	14"	6 9/16"	6 3/4"	12	SD50-40245	SD5030240Y	31.33	23.50
14 3/4"	16 1/2"	7"	14"	14 3/4"	6 3/4"	6	SD50-40245	SD5030250Y	44.13	33.09
18"	8 1/4"	9"	17 1/8"	6 1/2"	8 1/4"	6	SD50-40265	SD5030265Y	52.60	39.45
18"	16 1/2"	11"	17 1/8"	14 7/8"	10 1/2"	3	SD50-40270	SD5030270Y	79.42	59.57
Stone										
Outside Length	Outside Width	Outside Height	Inside Length	Inside Width	Inside Height	Standard Pack	Use Dividers	Order No.	Regular Price	SALE
5 3/8"	4 1/8"	3"	4 3/4"	3 7/16"	2 13/16"	24	SD50-40210S	SD5030210S	3.56	2.67
7 3/8"	4 1/8"	3"	6 3/4"	3 7/16"	2 13/16"	24	SD50-40220S	SD5030220S	6.58	4.94
10 7/8"	5 1/2"	5"	10 1/4"	4 3/8"	4 3/4"	12	SD50-40230S	SD5030230S	16.00	11.99
10 7/8"	11"	5"	10 1/4"	10"	4 3/4"	6	SD50-40230S	SD5030235S	24.68	18.50
10 3/4"	8 1/4"	7"	10"	6 9/16"	6 3/4"	6	SD50-40239S	SD5030239S	26.46	19.85
14 3/4"	8 1/4"	7"	14"	6 9/16"	6 3/4"	12	SD50-40245S	SD5030240S	31.33	23.50
14 3/4"	16 1/2"	7"	14"	14 3/4"	6 3/4"	6	SD50-40245S	SD5030250S	44.13	33.09
18"	8 1/4"	9"	17 1/8"	6 1/2"	8 1/4"	6	SD50-40265S	SD5030265S	52.60	39.45
18"	16 1/2"	11"	17 1/8"	14 7/8"	10 1/2"	3	SD50-40270S	SD5030270S	79.42	59.57
Red										
Outside Length	Outside Width	Outside Height	Inside Length	Inside Width	Inside Height	Standard Pack	Use Dividers	Order No.	Regular Price	SALE
5 3/8"	4 1/8"	3"	4 3/4"	3 7/16"	2 13/16"	24	SD50-40210R	SD5030210R	3.56	2.67
7 3/8"	4 1/8"	3"	6 3/4"	3 7/16"	2 13/16"	24	SD50-40220R	SD5030220R	6.58	4.94
10 7/8"	5 1/2"	5"	10 1/4"	4 3/8"	4 3/4"	12	SD50-40230R	SD5030230R	16.00	11.99
10 7/8"	11"	5"	10 1/4"	10"	4 3/4"	6	SD50-40230R	SD5030235R	24.68	18.50
10 3/4"	8 1/4"	7"	10"	6 9/16"	6 3/4"	6	SD50-40239R	SD5030239R	26.46	19.85
14 3/4"	8 1/4"	7"	14"	6 9/16"	6 3/4"	12	SD50-40245R	SD5030240R	31.33	23.50
14 3/4"	16 1/2"	7"	14"	14 3/4"	6 3/4"	6	SD50-40245R	SD5030250R	44.13	33.09
18"	8 1/4"	9"	17 1/8"	6 1/2"	8 1/4"	6	SD50-40265R	SD5030265R	52.60	39.45
18"	16 1/2"	11"	17 1/8"	14 7/8"	10 1/2"	3	SD50-40270R	SD5030270R	79.42	59.57
Blue										
Outside Length	Outside Width	Outside Height	Inside Length	Inside Width	Inside Height	Standard Pack	Use Dividers	Order No.	Regular Price	SALE
5 3/8"	4 1/8"	3"	4 3/4"	3 7/16"	2 13/16"	24	SD50-40210B	SD5030210B	3.56	2.67
7 3/8"	4 1/8"	3"	6 3/4"	3 7/16"	2 13/16"	24	SD50-40220B	SD5030220B	6.58	4.94
10 7/8"	5 1/2"	5"	10 1/4"	4 3/8"	4 3/4"	12	SD50-40230B	SD5030230B	16.00	11.99
10 7/8"	11"	5"	10 1/4"	10"	4 3/4"	6	SD50-40230B	SD5030235B	24.68	18.50
10 3/4"	8 1/4"	7"	10"	6 9/16"	6 3/4"	6	SD50-40239B	SD5030239B	26.46	19.85
14 3/4"	8 1/4"	7"	14"	6 9/16"	6 3/4"	12	SD50-40245B	SD5030240B	31.33	23.50
14 3/4"	16 1/2"	7"	14"	14 3/4"	6 3/4"	6	SD50-40245B	SD5030250B	44.13	33.09
18"	8 1/4"	9"	17 1/8"	6 1/2"	8 1/4"	6	SD50-40265B	SD5030265B	52.60	39.45
18"	16 1/2"	11"	17 1/8"	14 7/8"	10 1/2"	3	SD50-40270B	SD5030270B	79.42	59.57



PRM PRO Cargo Tool Bags with Zip Closure

- Top opening reinforced with metal
- Pop open design, 4 exterior pockets, 2 side strapping for levels, 8 interior pockets and large compartment for tools and parts
- Padded handle and shoulder strap made from heavy duty water repellent polyester



Length	Width	Height	Order No.	Regular Price	SALE
18"	9"	11"	LC707697	53.35	40.04
24"	9"	12"	LC707699	59.47	44.54

5487

PRM PRO 25" Tote Tool Bag

- Made from heavy duty water repellent polyester
- Hard bottom reinforced base with studs for base protection
- Closed top with zip and framed opening
- 19 exterior pockets and 18 interior pockets; 2 side strapping for levels
- Includes padded handle and detachable shoulder strap



Length	Width	Height	Order No.	Regular Price	SALE
25"	12"	13"	LC707701	93.88	70.46

5482



Plastic Poly Trucks

- Heavy-duty molded plastic body
- All-welded steel angle-iron frame
- Casters welded to frame in a corner pattern
- Load capacity 400-1000 lbs.



Volume Capacity	Load Capacity	Overall Length	Overall Width	Overall Height	Color	Order No.	Regular Price	SALE
30 gallons	400 lbs	32-3/4"	21-1/4"	19-3/4"	Gray	BH0210004	301.85	271.67
41 gallons	400 lbs	32-1/4"	23-1/4"	24"	Gray	BH0210006	259.56	233.60
51 gallons	400 lbs	37"	24-1/2"	23-3/4"	Gray	BH0210007	273.98	246.58
57 gallons	400 lbs	36-1/4"	24-1/4"	27"	Gray	BH0210008	302.82	272.53
73 gallons	600 lbs	38-1/4"	29-1/4"	31"	Gray	BH0210010	317.24	285.51
84 gallons	600 lbs	38"	28-1/4"	34-1/4"	Gray	BH0210012	331.66	298.49
115 gallons	600 lbs	43-3/4"	31-3/4"	35"	Gray	BH0210014	353.29	317.96
125 gallons	800 lbs	45"	31"	36"	Gray	BH0210016	360.50	324.45
145 gallons	800 lbs	46-1/4"	34"	37-3/4"	Gray	BH0210018	389.34	350.40
151 gallons	800 lbs	46"	34"	39"	Gray	BH0210020	425.39	382.85
320 gallons	1000 lbs	71"	47-1/2"	36-3/4"	Gray	BH0210040	836.36	752.72

29954

PRM PRO 20" All Purpose Tool Bag

- Made from heavy duty water repellent polyester
- For easy storage of welding helmet, welding jacket, tools and gloves
- Closed top with zip
- Includes padded handle and detachable shoulder strap



Length	Width	Height	Order No.	Regular Price	SALE
20"	11"	13"	LC700001	68.26	51.24

5461

ENERPAC Cylinders

- Equipped with hardened removable grooved saddles
- Unique GR2 bearing design, reduces wear, extending life
- Collar threads, plunger threads and base mounting holes enable easy fixturing
- Designed for use in all positions
- High strength alloy steel for durability
- Redesigned cylinder thread protector for ease of use
- Heavy-duty, pretensioned spring improves retraction speed
- Baked enamel finish for increased corrosion resistance
- CR-400 coupler and dust cap included on all models
- Plunger wiper reduces contamination, extending cylinder life



Type	Cylinder Effective Area	Stroke	Usage Oil Capacity	Weight	Model No	Order No.	Regular Price	SALE
General Purpose Cylinders	2.24	2.13	4.75	5.1 lbs	RC-102	KL70300761	889.00	800.08
General Purpose Cylinders	2.24	6.13	13.7	9.8 lbs	RC-106	KL70300822	1,085.00	976.43
General Purpose Cylinders	2.24	10.13	22.65	14 lbs	RC-1010	KL70300860	1,432.20	1,288.93
General Purpose Cylinders	5.16	6.25	32.23	22 lbs	RC-256	KL70301386	1,768.20	1,591.33

5327

STANLEY 26-1/2" Top and Middle Chests

- Double wall steel construction holds up to frequent use.
- •85 lb. full-extension ball-bearing drawer slides operate smoothly.
- •Adds storage between the tool chest and rolling cabinet.
- •Keyed internal locking system safeguards tools.
- •Large drawer trim provides extra finger clearance.
- •1,896 cubic inches of storage.



KP436032



KP436040

Middle Tool Chest										
Number of Drawers	Drawer Type	Height	Width	Depth	Color	Total Cubic Inches	ManufacturerNo	Order No.	Regular Price	SALE
2	Ball Bearing	10.25"	26"	16"	Black	1,896	STST22625BK	KP436032	395.53	332.24

Tool Chest										
Number of Drawers	Drawer Type	Height	Width	Depth	Color	Total Cubic Inches	ManufacturerNo	Order No.	Regular Price	SALE
5	Ball Bearing	19.75"	26"	16"	Black	5,840	STST22657BK	KP436040	672.32	564.76

29393

LIFALL 2" Wide General Duty Ratchet Assemblies

- Ultimate strength 5000 lbs
- Working load limit rounded to 1600 lbs
- 2" Wide yellow webbing with bright orange stripe one side
- 10" web length on fixed end



Length	Style	Order No.	Regular Price	SALE
27 feet	Ratchet Hook Buckle	SE8560501	115.47	92.37
27 feet	Ratchet Hook Buckle	SE8560507	154.74	108.31
30 feet	Ratchet Hook Buckle	SE8560502	119.95	95.95
30 feet	Ratchet Hook Buckle	SE8560508	159.21	111.44

23703



KANT TWIST Standard "T" Handle Style Clamps

- Multi-purpose clamp that combines the best features of an ordinary "C" clamp and parallel clamps
- Free floating jaws adjusts to unparallel surfaces
- Copper plated jaws and screws are ideal for welding
- Built in "V" blocks is perfect for holding round stock
- Cantilever action provides 4:1 ratio



Maximum Opening Capacity	Open Throat Depth	Closed Throat Depth	Load Capacity	Order No.	Regular Price	SALE
1"	3/8"	1/2"	350 lbs	SE64401	32.54	25.08
2"	1 1/8"	1 1/4"	800 lbs	SE64405	45.30	34.81
3"	1 1/4"	1 3/4"	1500 lbs	SE64410	74.18	57.00
9"	3 3/8"	5 1/4"	2500 lbs	SE64430	197.22	151.71
12"	12"	7"	6000 lbs	SE64440	351.49	270.39

1283

ISV SQ Series Regular Duty "L" Clamps

- Easy to use, just slide moveable arm into position and tighten screw spindle
- Instant clamping at any opening
- Save 90% of clamping time versus the ordinary "C" Clamp



Maximum Opening	Throat Depth	Clamping Pressure	Order No.	Regular Price	SALE
12"	4 3/4"	2,660 lbs	SG75SQ12	163.93	141.86
20"	4 3/4"	2,660 lbs	SG75SQ20	212.93	184.26
6"	4 3/4"	1330 lbs	SG75SQ4	80.94	70.09
8"	4 3/4"	2,660 lbs	SG75SQ8	137.17	118.66

22787



Collet Sets

in Wooden Tray



ER8						
Quantity	Diameter Range	BrandName	Order No.	Regular Price	SALE	
3	0.0429" - 0.1875"	Rego-Fix	GM20110800002	214.20	198.59	
9	0.5 mm - 5 mm	Rego-Fix	GM20110800000	635.60	589.16	
9	1 mm - 5 mm	Techniks	GM70701198	425.60	350.70	

ER11						
Quantity	Diameter Range	BrandName	Order No.	Regular Price	SALE	
13	0.5 mm - 7 mm	Rego-Fix	GM20111100000	764.40	708.62	
13	1 mm - 7 mm	Morse Cutting Tools	MX1326315	441.53	331.15	
13	1 mm - 7 mm	Techniks	GM70701203	532.00	410.97	
7	0.5 mm - 7 mm	Parlec	GM99S013	705.60	654.08	
7	1/16" - 1/4"	Morse Cutting Tools	MX1326309	241.19	180.89	
7	0.0429" - 0.25"	Rego-Fix	GM20111100002	418.60	388.05	
7	1/32" - 1/4"	Techniks	GM70701199	289.80	223.86	

ER16						
Quantity	Diameter Range	BrandName	Order No.	Regular Price	SALE	
10	0.5 mm - 10 mm	Parlec	GM99S010	494.20	458.08	
10	0.5 mm - 10 mm	Rego-Fix	GM20111600000	537.60	498.41	
10	1/32" - 3/8"	Techniks	GM70701699	414.40	320.18	
10	1 mm - 10 mm	Morse Cutting Tools	MX1326316	323.16	258.58	
10	1 mm - 10 mm	Techniks	GM70701700	396.20	306.04	
10	3/32" - 3/8"	Techniks	GM6904543IS	753.20	698.18	
12	1/16" - 13/32"	Morse Cutting Tools	MX1326310	391.44	313.18	
12	1/16" - 13/32"	Parlec	GM99ER16S012	576.80	534.66	
12	0.0429" - 0.4063"	Rego-Fix	GM20111600002	680.40	630.75	
8	3 mm - 10 mm	Techniks	GM6904543MS	602.00	558.04	

ER20						
Quantity	Diameter Range	BrandName	Order No.	Price	SALE	
11	2 mm - 13 mm	Techniks	GM6904544MS	904.40	838.32	
12	1/16" - 1/2"	Techniks	GM70702199	516.60	399.07	
12	1 mm - 13 mm	Parlec	GM99S012	646.80	599.62	
12	1 mm - 13 mm	Rego-Fix	GM20112000000	638.40	591.83	
12	2 mm - 13 mm	Morse Cutting Tools	MX1326317	377.79	302.26	
12	2 mm - 13 mm	Techniks	GM70702200	541.80	418.60	
12	5/32" - 1/2"	Techniks	GM6904544IS	985.60	913.64	
14	3/32" - 1/2"	Parlec	GM99ER20S014	742.00	687.82	
7	0.085" - 0.5"	Rego-Fix	GM20112000002	378.00	350.39	
8	3/32", 1/8" - 1/2"	Morse Cutting Tools	MX1326311	250.31	200.20	

ER25						
Quantity	Diameter Range	BrandName	Order No.	Regular Price	SALE	
10	3/32", 1/8" - 5/8"	Morse Cutting Tools	MX1326312	348.19	278.60	
14	3 mm - 16 mm	Techniks	GM6904545MS	1,272.80	1,179.64	
14	7/32" - 3/4"	Techniks	GM6904545IS	1,234.80	1,144.64	
15	1 mm - 16 mm	Parlec	GM99S015	788.20	730.66	
15	2 mm - 16 mm	Rego-Fix	GM20112500000	823.20	763.08	
15	2 mm - 16 mm	Morse Cutting Tools	MX1326318	496.16	396.90	
15	2 mm - 16 mm	Techniks	GM70702600	691.60	534.24	
15	5/32" - 5/8"	Techniks	GM70702599	729.40	563.50	
9	0.085" - 0.625"	Rego-Fix	GM20112500002	497.00	460.75	

ER32						
Quantity	Diameter Range	BrandName	Order No.	Regular Price	SALE	
12	1/8" - 13/16"	Morse Cutting Tools	MX1326313	464.31	371.42	
12	0.085" - 0.6125"	Rego-Fix	GM20113200002	701.40	650.21	
18	2 mm - 20 mm	Parlec	GM99S018	967.40	896.84	
18	2 mm - 20 mm	Rego-Fix	GM20113200000	1,026.20	951.32	
18	3 mm - 16 mm	Techniks	GM6904546MS	1,703.80	1,579.48	
18	3 mm - 20 mm	Morse Cutting Tools	MX1326319	676.00	540.82	
18	3 mm - 20 mm	Techniks	GM70704000	820.40	633.78	
18	7/32" - 3/4"	Techniks	GM6904546IS	1,703.80	1,579.48	
18	7/32" - 3/4"	Techniks	GM70703999	820.40	633.78	
21	1/8" - 3/4"	Parlec	GM99ER32S022	1,113.00	1,031.80	

ER40						
Quantity	Diameter Range	BrandName	Order No.	Regular Price	SALE	
13	1/8" - 1"	Techniks	GM70704999	658.00	508.34	
14	0.085" - 1"	Rego-Fix	GM20114000002	1,041.60	965.60	
14	2 mm - 16 mm	Techniks	GM6904547MS	1,661.80	1,540.49	
15	1/8" - 1"	Morse Cutting Tools	MX1326314	728.38	582.68	
15	3/8" - 1"	Techniks	GM6904547IS	1,542.80	1,430.17	
23	3 mm - 26 mm	Rego-Fix	GM20114000000	1,625.40	1,506.70	
23	4 mm - 26 mm	Parlec	GM99S023	1,577.80	1,462.58	
23	4 mm - 26 mm	Morse Cutting Tools	MX1326320	1,092.60	874.02	
23	4 mm - 26 mm	Techniks	GM70705000	1,162.00	897.68	

ER50						
Quantity	Diameter Range	BrandName	Order No.	Regular Price	SALE	
10	3/32" - 3/8"	Techniks	GM6904548IS	1,773.80	1,644.30	
12	10 mm - 34 mm	Rego-Fix	GM20115000000	1,855.00	1,719.59	
17	6 mm - 34 mm	Techniks	GM70706000	1,642.20	1,268.54	

DA100						
Quantity	Diameter Range	BrandName	Order No.	Regular Price	SALE	
15	1/8" - 9/16"	Techniks	TE130161015S	397.60	368.62	
21	1/4" - 9/16"	Techniks	TE130161021S	555.80	515.20	
29	1/8" - 9/16"	Techniks	TE130161029S	768.60	712.46	
33	1/16" - 9/16"	Techniks	TE130161033S	873.60	809.83	
8	1/8" - 9/16"	Techniks	TE13016108S	212.80	197.26	

DA180						
Quantity	Diameter Range	BrandName	Order No.	Regular Price	SALE	
17	1/4" - 3/4"	Techniks	TE130161817S	575.40	533.40	
21	1/8" - 3/4"	Techniks	TE130161821S	711.20	659.26	
33	1/4" - 3/4"	Techniks	TE130161833S	1,115.80	1,034.32	
41	1/8" - 3/4"	Techniks	TE130161841S	1,387.40	1,286.18	
9	1/4" - 3/4"	Techniks	TE13016189S	305.20	282.94	

DA200						
Quantity	Diameter Range	BrandName	Order No.	Regular Price	SALE	
17	1/8" - 3/8"	Techniks	TE130162017S	450.80	417.90	
21	1/16" - 3/8"	Techniks	TE130162021S	555.80	515.20	
9	1/8" - 3/8"	Techniks	TE13016209S	239.40	221.90	

DA300						
Quantity	Diameter Range	BrandName	Order No.	Regular Price	SALE	
14	3/64" - 1/4"	Techniks	TE130163014S	371.00	343.98	
7	1/16" - 1/4"	Techniks	TE13016307S	186.20	172.62	

TG100						
Quantity	Diameter Range	BrandName	Order No.	Regular Price	SALE	
15	1/8" - 1"	Techniks	TE130401015S	750.40	695.66	
41	3/8" - 1"	Techniks	TE130401041S	2,049.60	1,899.94	

TG75						
Quantity	Diameter Range	BrandName	Order No.	Regular Price	SALE	
11	1/8" - 3/4"	Techniks	TE130400811S	544.60	504.84	
22	1/8" - 3/4"	Techniks	TE130400822S	1,085.00	1,005.76	
43	1/8" - 3/4"	Techniks	TE130400843S	2,126.60	1,971.34	

1093



RAPIDHOLD™ 5C Collet Sets

- Made of High Grade Steel
- Hardened and Precision Ground
- Internal thread 1.041"-24
- External Thread 1.242"-20
- .0005" T.I.R



Diameter Range	Quantity	Number of Stands Included	Opening Shape	Order No.	Regular Price	SALE
1/16" - 1 1/8"	18	1	Round	GP872308218	503.72	352.59
1/16" - 1 1/8"	35	1	Round	GP872308235	983.30	688.25
1/16" - 1 1/8"	69	1	Round	GP872308269	1,885.46	1,319.80

24553



All Steel Bench Vises with Swivel Base

- Unbreakable all steel body
- Permanent pipe jaws and anvil
- 360° Swivel base with locks



Jaw Width	Jaw Height	Jaw Opening Capacity	Weight	Order No.	Regular Price	SALE
4"	2 1/4"	4"	17.00 lbs	HZ60SV4	191.54	134.68
5"	2 5/8"	5"	24.00 lbs	HZ60SV5	268.42	188.72
6"	3"	6"	32.00 lbs	HZ60SV6	316.53	222.60
8"	3 1/2"	8"	62.00 lbs	HZ60SV8	399.34	280.84

1196



DX Series Crossover™ Vises

- DX Crossover™ vises are a combination of AngLock®, Pull-Type and 4 bolt stationary jaw design.
- Hardened vise bed/jaw plates
- Semi-hard steel screw
- 80,000 psi ductile iron body, nut and movable jaw
- Bolts & locates on 40mm, 50mm and 2" grid patterns
- Accepts sine keys for alignment (not included)
- Chip evacuation straight through the body
- Screw support held in place with snap rings
- GrooveLock® jaw plate and workstop included
- New brush seal design makes it easier to replace
- Includes chip guard
- Powder coat paint is long lasting and durable
- Lifetime Iron Clad Warranty



Model No	Jaw Width	Jaw Opening Capacity	Base Length	Base Width	Base Height	Weight	Order No.	Regular Price	SALE
DX4	4"	6.5"	12.5"	4.962"	2.250"	30 lbs	HT80DX4	1,098.72	933.91
DX6	6"	9.08"	16.8"	7.391"	2.875"	67.8 lbs	HT80DX6	1,125.18	956.41

1296

PALMGREN INC Angle Vises

- Cradle base has a 90° vertical scale in 1° graduations
- Quick setup at 0°, 30°, 45°, 60°, and 90° with positive pin stops
- Hand-tightened mechanism allows secure locking in all positions
- Base includes 1/2" shoulder slots for bolting to drill press



Jaw Width	Jaw Opening Capacity	Jaw Height	Base Length	Base Width	Weight	Order No.	Regular Price	SALE
2 1/2"	2 1/2"	1 1/8"	5 9/16"	6 3/8"	10 lbs	JB50AVC25	284.94	246.62
3 1/2"	3 1/2"	1 1/2"	7"	7 3/8"	17 lbs	JB50AVC35	365.92	316.59

1423

RAPIDHOLD™ Low Profile Drill Press Vises

- Designed for drilling, tapping and reaming operations
- Base has four 1/2" shoulder slots for quick, easy positioning on drill press tables
- Moveable jaw is flat and the fixed jaw has a vertical and horizontal v-groove cut
- Replaceable jaws



Jaw Width	Jaw Opening Capacity	Jaw Height	Weight	Order No.	Regular Price	SALE
3"	3"	1 1/8"	10 lbs	HT968461	74.10	51.84
4"	4"	1 1/2"	15 lbs	HT968462	101.32	70.86
6"	6"	2"	34 lbs	HT968464	230.57	161.43
8"	8"	2"	54 lbs	HT968465	356.58	249.57

1550



Parallel Keepers 6" & 8"

- Place your parallels in the vise against the jaws
- Take the Parallel Keeper, squeeze them together and place them inside the parallels
- Release the Parallel Keeper, they will push against the parallels, holding them against the hard jaws of the vise



For Use With	Order No.	Regular Price	SALE
All 6" Vises	HT80KPS6000	154.00	130.55
All 8" Vises	HT80KPS8000	198.80	169.40

1306



Forged Adjustable Clamps

- Automatically compensates for clamping height changes within their clamping ranges
- The swivel bushing is permanently mounted in the clamp which alleviates lost or missing parts
- Standard brass heel plate protects the machine table
- Material: 1137 Forged Steel, heat Treated
- Finish: Black Oxide
- One Piece Construction
- Versatile Clamping Height



Bolt Size	Clamping Range	Clamp Width	Clamp Thickness	Heel to Center	Maximum Torque	Clamping Force	Order No.	Regular Price	SALE
1/2"	0-2"	1 3/4"	1 1/2"	2 1/2"	90 ft/lbs	6,800 lbs	SG6619101	76.44	70.86
5/8"	0-2 3/8"	2"	1 5/8"	3"	180 ft/lbs	10,600 lbs	SG6619102	95.28	88.32
3/4"	0-2 3/4"	2 1/2"	1 3/4"	3 3/4"	300 ft/lbs	16,000 lbs	SG6619103	144.62	134.06
7/8"	0-3 1/2"	3"	2 3/8"	4 1/4"	500 ft/lbs	21,800 lbs	SG6619104	214.20	198.56

1256



Wireless Jobsite Speaker

- Connects wirelessly via Bluetooth or a wired auxiliary input
- 32.8-foot (10 m) connectivity range (in open space)
- 10-Hour battery life
- Drop protected up to 6.6-foot (2 m)
- Powerful rear magnet holds speaker to metal surfaces (panels, ducts, etc.)
- 1/4-20 threaded mount on bottom allows attachment to any standard tripod
- Rated IP45 water/dust resistant
- Able to answer calls hands-free with the built-in speakerphone
- Includes 1/8-Inch (3.5 mm) stereo auxiliary cable and micro USB-to-standard USB charging cable



Type	Watt-age	Color	ManufacturerNo	Order No.	Regular Price	SALE
Wireless	5 W	Orange, Black, Gray	AEPIS1	KP6040000	108.04	90.84

28842



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PRM PRO Universal Socket Toolset

- Perfect universal tool bit & socket set for unlimited applications
- Bits and socket made from chrome vanadium S2 Steel - S2 steel is stronger and longer lasting
- Universal socket has 40 spring adapted pins that auto-forms around fastener head or nut, ranging from 7-to 19mm or 9/32 to 11/16 standard
- Universal socket great helper for irregular shaped fastener bolts and nuts.
- Bits include: Pozidrive, Phillips, slotted, hex, torx-star style, hex, and square.
- Set includes: 15pcs bits: PZ2 PH2 PH3 SL5 SL6 H3 H4 H5 SQ1 SQ2 T10 T15 T20 T25 T30, CRV universal socket with 40cr pins (grip-range 7-19mm, 9/32-11/16), 2" extension & reversable Ratchet."



Order No.	Regular Price	SALE
TL0510018	28.77	20.16

Uniflute® Countersinks - High Speed Steel

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



Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	100 Degrees			60 Degrees			120 Degrees			90 Degrees			82 Degrees		
			Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
1/8"	1/8"	1-1/2"	BC7061016	15.83	13.45	BC7061001	15.83	13.45	BC7061021	15.83	13.45	BC7061011	15.83	13.45	BC7061005	15.83	13.45
3/16"	3/16"	1-1/2"	BC7061041	16.32	13.67	BC7061026	16.32	13.67	BC7061046	16.32	13.67	BC7061036	16.32	13.67	BC7061031	16.32	13.67
1/4"	1/4"	2"	BC7061066	17.02	14.46	BC7061051	17.02	14.46	BC7061071	17.02	14.46	BC7061061	17.02	14.46	BC7061056	17.02	14.46
3/8"	1/4"	2"	BC7061091	19.33	16.42	BC7061076	19.33	16.42	BC7061096	19.33	16.42	BC7061086	19.33	16.42	BC7061081	19.33	16.42
1/2"	1/4"	2"	BC7061116	23.56	20.02	BC7061101	23.56	20.02	BC7061121	23.56	20.02	BC7061111	23.56	20.02	BC7061106	23.56	20.02
5/8"	1/4"	2-1/4"	BC7061141	31.46	26.74	BC7061126	31.46	26.74	BC7061146	31.46	26.74	BC7061136	31.46	26.74	BC7061131	31.46	26.74
3/4"	1/2"	2-3/4"	BC7061166	45.93	39.03	BC7061151	45.93	39.03	BC7061171	45.93	39.03	BC7061161	45.93	39.03	BC7061156	45.93	39.03
1"	1/2"	2-3/4"	BC7061191	76.51	65.04	BC7061176	76.51	65.04	BC7061196	76.51	65.04	BC7061186	76.51	65.04	BC7061181	76.51	65.04
1-1/4"	1/2"	3"	-	-	-	BC7061201	149.67	127.23	-	-	-	BC7061211	149.67	127.23	BC7061206	149.67	127.23
1-1/2"	3/4"	3-1/2"	-	-	-	BC7061216	202.64	172.24	-	-	-	BC7061226	202.64	172.24	BC7061221	202.64	172.24
2"	3/4"	3-3/4"	-	-	-	BC7061231	363.79	309.21	-	-	-	BC7061241	363.79	309.21	BC7061236	363.79	309.21
2-1/2"	3/4"	5"	-	-	-	BC7061246	970.06	824.55	-	-	-	BC7061256	970.06	824.55	BC7061251	970.06	824.55
3"	3/4"	5-1/4"	-	-	-	BC7061261	1,130.95	961.31	-	-	-	BC7061271	1,130.95	961.31	BC7061266	1,130.95	961.31

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

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6 Flute Chatterless Countersinks - High Speed Steel

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



Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	60 Degrees			90 Degrees			100 Degrees			82 Degrees			120 Degrees		
			Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
1/8"	1/8"	1-1/2"	BC7579021	15.15	12.88	BC7579031	15.15	12.88	BC7579036	15.15	12.88	BC7579026	15.15	12.88	BC7579041	15.15	12.88
3/16"	3/16"	1-1/2"	BC7579046	16.59	14.11	BC7579056	16.59	14.11	BC7579061	16.59	14.11	BC7579051	16.59	14.11	BC7579066	16.59	14.11
1/4"	1/4"	2"	BC7579071	16.80	14.30	BC7579081	16.80	14.30	BC7579086	16.80	14.30	BC7579076	16.80	14.30	BC7579091	16.80	14.30
5/16"	1/4"	2"	BC7579096	20.03	17.01	BC7579106	20.03	17.01	BC7579111	20.03	17.01	BC7579101	20.03	17.01	BC7579116	20.03	17.01
3/8"	1/4"	2"	BC7579121	20.79	17.61	BC7579131	20.79	17.61	BC7579136	20.79	17.61	BC7579126	20.79	17.61	BC7579141	20.79	17.61
1/2"	3/8"	2"	BC7579146	25.66	21.82	BC7579156	25.66	21.82	BC7579161	25.66	21.82	BC7579151	25.66	21.82	BC7579166	25.66	21.82
5/8"	3/8"	2-1/4"	BC7579171	37.06	31.45	BC7579181	37.06	31.45	BC7579186	37.06	31.45	BC7579176	37.06	31.45	BC7579191	37.06	31.45
3/4"	1/2"	2-3/4"	BC7579196	50.81	43.20	BC7579206	50.81	43.20	BC7579211	50.81	43.20	BC7579201	50.81	43.20	BC7579216	50.81	43.20
7/8"	1/2"	2-3/4"	BC7579221	69.73	59.31	BC7579231	69.73	59.31	BC7579236	69.73	59.31	BC7579226	69.73	59.31	BC7579241	69.73	59.31
1"	1/2"	2-3/4"	BC7579246	77.64	65.92	BC7579256	77.64	65.92	BC7579261	77.64	65.92	BC7579251	77.64	65.92	BC7579266	77.64	65.92
1-1/4"	1/2"	3"	BC7579271	118.96	101.16	BC7579281	118.96	101.16	BC7579286	118.96	101.16	BC7579276	118.96	101.16	BC7579291	118.96	101.16
1-1/2"	3/4"	3-1/2"	BC7579296	170.45	144.88	BC7579306	170.45	144.88	BC7579311	170.45	144.88	BC7579301	170.45	144.88	BC7579316	170.45	144.88
2"	3/4"	3-3/4"	BC7579321	289.16	245.82	BC7579331	289.16	245.82	BC7579336	289.16	245.82	BC7579326	289.16	245.82	BC7579341	289.16	245.82
2-1/2"	3/4"	5"	BC7579346	748.57	636.32	BC7579356	748.57	636.32	-	-	-	BC7579351	748.57	636.32	-	-	-
3"	3/4"	5-1/4"	BC7579361	1,030.68	876.12	BC7579371	1,030.68	876.12	-	-	-	BC7579366	1,030.68	876.12	-	-	-

†Straight shank with tang drive.

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Prices Effective October 1 through December 31, 2025

Not all items exactly as pictured. Not responsible for typographical errors. We reserve the right to limit quantities. Items available while supplies last.