



5500 Tomken Rd, Unit #2
 Mississauga, ON L4W 2Z4
www.caliberindustrial.com
sales@caliberindustrial.com

Mississauga: 905.624.5524
 Toronto: 416.626.7151
 Toll Free: 1.800.465.5743
 Fax: 905.602.8758



**Zirconia Premium Small Cut-Off
 Wheels - Type 1**



Air Die Grinders



Taper Pipe Taps

CARBIDE



Engraving Tool



- High positive rake angle
- High speeds, high feed rates - up to 20,000 RPM
- Economical with each insert having two cutting edges with excellent repeatability

Angle	Master Insert Identification (MIID)	Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	Order No.	Regular Price	SALE
45 De-grees	V04506TW06-NC2071	0.236"	1.575"	FG7010068	174.39	154.48
60 De-grees	V06006TW06-NC2071	0.236"	1.575"	FG7010069	174.39	154.48

22054



Spot Drill and Engraving

Inserts

Grade Selection

NC40 - TiN coated universal insert for carbon steel, alloy steel and cast iron applications

NC2071 - TiN coated high positive geometry, fully ground edge and relief angle. Universal grade for most all materials.



Inscribed Circle Diameter (IC)	Insert Thickness (S)	Corner Radius (RE)	Grade	Order No.	Regular Price	SALE
0.196"	0.071"	0.016"	NC2071	FG7120002	55.31	48.61
0.236"	0.079"	0.008"	NC2071	FG7120008	60.93	56.23
0.236"	0.079"	0.008"	NC2071	FG7120009	74.64	65.63
0.312"	0.094"	0.031"	NC40	FG7120003	52.99	46.53
0.315"	0.094"	0.016"	NC2071	FG7120000	58.29	54.92
0.315"	0.094"	0.031"	NC2071	FG7120006	90.58	86.31
0.433"	0.156"	0.031"	NC40	FG7120004	52.99	46.53
0.472"	0.156"	0.031"	NC2071	FG7120001	89.03	78.20
0.669"	0.187"	0.047"	NC2071	FG7120005	95.86	93.02

22053



Buy a Complete Boring Bar Set

Includes 4 Boring Bars and 20 TiN Coated Inserts

Set Includes: Boring Bar No. (1 ea.) Shank Size Minimum Bore

- TPBN 06-2 1/2 .430
- TPBN 08-2 1/2 .590
- TPBN 10-2 5/8 .682
- TPBN 12-3 3/4 .845
- (10) TPGH 21.51 inserts
- (10) TPGH 321 inserts
- (1) Torx key T7
- (1) Torx key T10
- (1) Storage case
- Note: Set includes TiN coated grade DPP30GT carbide inserts for general purpose alloy steel, stainless and ductile iron applications



Order No.	Regular Price	SALE
FL4543840	925.51	900.00

8663



0° Lead End Mills

Chip-Surfer Style

- Indexable economy
- Quick cutter head replacement
- HiPos, high shear geometry
- Insert size: 6mm IC
- Uses UOMT06 insert



Cutting Diameter (DC)	Cutting Item Count (CICT)	Head Length (LH)	Coolant Supply Property (CSP)	Order No.	Regular Price	SALE
3/8"	2	-	-	IC523040802	365.75	360.95
1/2"	3	-	-	IC523040803	380.94	368.09
1/2"	-	0"	-	IC523040804	390.6	377.17
5/8"	4	-	-	IC523040805	523.1	501.72
3/4"	5	-	-	IC523040807	574.16	549.72

23414



0° Lead End Mills

- Indexable economy
- HiPos, high shear geometry
- Insert size: 6mm IC
- Uses UOMT06 insert



Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Head Length (LH)	Overall Length (OAL)	Cutting Item Count (CICT)	Order No.	Regular Price	SALE
3/8"	3/8"	-	2-1/2"	2	IC523018960	365.75	353.81
1/2"	1/2"	-	3"	2	IC523018963	380.94	368.09
1/2"	1/2"	-	2-3/4"	3	IC523018964	390.60	377.17
0.62"	5/8"	-	6"	3	IC523018966	470.65	452.42
3/4"	3/4"	-	3-3/4"	5	IC523018968	574.16	549.72

23415



Carbide Boring Bars

- Deep boring
- Carbide shank
- Alloy steel head- hardened to RC 40-44
- Focused coolant-thru delivery system
- Threaded end on 1/2" and larger bars



Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	Minimum Bore Diameter (DMIN)	Master Insert Identification (MIID)	Order No.	Regular Price	SALE
3/8"	6"	0.396"	CCMT2151	FL4559595	324.76	312.30
1/2"	5"	0.55"	CCMT2151	FL4559599	335.7	322.10
1/2"	8"	0.55"	CCMT2151	FL4559603	442.08	417.90
5/8"	6"	0.74"	CCMT3252	FL4559623	423.78	401.40
5/8"	10"	0.74"	CCMT3252	FL4559627	609.43	568.50
3/8"	6"	0.396"	CPMT2151	FL4559635	324.76	312.30
1/2"	8"	0.55"	CPMT2151	FL4559643	442.08	417.90
5/8"	6"	0.74"	CPMT2151	FL4559647	423.78	401.40
5/8"	6"	0.74"	CPMT3252	FL4559663	423.78	401.40
5/8"	10"	0.74"	CPMT3252	FL4559667	609.43	568.50
3/8"	6"	0.456"	TCMT2151	FL4559763	324.76	312.30
1/2"	5"	0.587"	TCMT2151	FL4559767	335.7	322.10
1/2"	8"	0.587"	TCMT2151	FL4559771	442.08	417.90
5/8"	10"	3/4"	TCMT2151	FL4559779	609.43	568.50
1"	8"	1.2"	CCMT3252	FL4559971	1041.78	957.60
3/4"	7"	0.93"	TCMT3252	FL4560027	663.94	617.50
3/4"	10"	0.93"	TCMT3252	FL4560029	858.07	792.30

23085

TOOL FLO Flo-Lock/Chip-Flo 60°
Threading Inserts

FLT

Carbide Grades:

- AC3 - PVD TiAlN for 300 series stainless steel and other high temp alloy steel in premium conditions
- AC50 - PVD TiAlN for standard steels and 400 series stainless steel
- GP50 - PVD TiN general purpose for standard steel



Product-Name	Pitch TPI External (TPI Ext)	Corner Radius (RE)	Cutting Edge Length (L)	Insert Thickness (S)	Order No.	Regular Price	SALE
FLT-2L	-	0.003" 0.005"	0.2661	0.15"	FG31FLT2LA	29.48	27.60
FLT-2R	-	0.003" 0.005"	0.2661	0.15"	FG31FLT2RA	29.48	27.60
FLT-2R AC50C	8-36	0.003" 0.005"	0.2661"	0.15"	FG31038190	29.48	27.60
FLT-2L	-	0.003" 0.005"	0.2661	0.15"	FG315041	27.27	25.70
FLT-2R	-	0.003" 0.005"	0.2661	0.15"	FG315040	27.27	25.70
FLT-3L	-	0.005" 0.008"	0.3999	0.195"	FG31FLT3LA	30.61	28.60
FLT-3L	-	0.005" 0.008"	0.3999	0.195"	FG31FLT3L	30.61	28.60
FLT-3R	-	0.005" 0.008"	0.3999	0.195"	FG315042	28.39	26.70
FLT-3L	-	0.005" 0.008"	0.3999	0.195"	FG315043	28.39	26.70
FLT-3010R AC3R	6-18	0.009" 0.011	0.3999"	0.195"	FG31038250	33.43	31.10
FLT-3010R AC50C	6-18	0.009" 0.011	0.3999"	0.195"	FG31038260	33.43	31.10
FLT-3010R GP50C	6-18	0.009" 0.011	0.3999"	0.195"	FG31038280	31.28	29.20
FLT-4L	-	0.005" 0.008"	0.375	0.255"	FG31FLT4LAC50	38.24	35.30
FLT-4R	-	0.005" 0.008"	0.375	0.255"	FG31FLT4R	38.24	35.30
FLT-4R GP50E	4-20	0.005" 0.008"	0.6298"	0.255"	FG315047	35.26	32.70

TOOL FLO Chip-Flo Grooving Inserts with Chipbreaker

FLG-CB

Carbide Grades

- AC3 - PVD TiAlN for 300 series stainless steel and other high temp alloy steel in premium conditions
- AC50 - PVD TiAlN for standard steels and 400 series stainless steel



AC3R						
Cutting Width (CW)	Corner Radius (RE)	Insert Thickness (S)	Cutting Depth Maximum (CDX)	Order No.	Regular Price	SALE
0.047"	0.0035"	0.15"	0.05"	FG31FLG2047RCB	35.12	32.50
0.047"	0.0035"	0.15"	0.05"	FG31FLG2047LCB	35.12	32.50
0.062"	0.0075"	0.15"	0.11"	FG31FLG2062RCB	35.12	32.50
0.062"	0.0075"	0.15"	0.11"	FG31FLG2062LCB	35.12	32.50
0.094"	0.0075"	0.15"	0.11"	FG31FLG2094RCB	35.12	32.50
0.094"	0.0075"	0.15"	0.11"	FG31FLG2094LCB	35.12	32.50
0.031"	0.0035"	0.195"	0.05"	FG31027740	35.12	32.50
0.031"	0.0035"	0.195"	0.05"	FG31027710	35.12	32.50
0.047"	0.0075"	0.195"	0.075"	FG31FLG3047RCB	35.12	32.50
0.047"	0.0075"	0.195"	0.075"	FG31FLG3047LCB	35.12	32.50
0.062"	0.0075"	0.195"	0.12"	FG31FLG3062RCB	35.12	32.50
0.062"	0.0075"	0.195"	0.12"	FG31FLG3062LCB	35.12	32.50
0.094"	0.0075"	0.195"	0.18"	FG31FLG3094LCB	35.12	32.50
1/8"	0.0075"	0.195"	0.18"	FG31FLG3125RCB	35.12	32.50
1/8"	0.0075"	0.195"	0.18"	FG31FLG3125LCB	35.12	32.50
1/8"	0.0075"	0.255"	0.29"	FG31030560	50.56	46.00
1/8"	0.0075"	0.255"	0.29"	FG31564825PLAC3	50.56	46.00

AC50C						
Cutting Width (CW)	Corner Radius (RE)	Insert Thickness (S)	Cutting Depth Maximum (CDX)	Order No.	Regular Price	SALE
0.047"	0.0035"	0.15"	0.05"	FG31026280	35.12	32.50
0.047"	0.0035"	0.15"	0.05"	FG31026240	35.12	32.50
0.062"	0.0075"	0.15"	0.11"	FG312662PRAC50C	35.12	32.50
0.062"	0.0075"	0.15"	0.11"	FG312662PLAC50C	35.12	32.50
0.094"	0.0075"	0.15"	0.11"	FG31026590	35.12	32.50
0.094"	0.0075"	0.15"	0.11"	FG31026540	35.12	32.50
0.031"	0.0035"	0.195"	0.05"	FG31563631PRAC5	35.12	32.50
0.031"	0.0035"	0.195"	0.05"	FG31563631PLAC5	35.12	32.50
0.047"	0.0075"	0.195"	0.075"	FG31563647PRAC5	35.12	32.50
0.047"	0.0075"	0.195"	0.075"	FG31027800	35.12	32.50
0.062"	0.0075"	0.195"	0.12"	FG31563662PRAC5	35.12	32.50
0.062"	0.0075"	0.195"	0.12"	FG31563662PLAC5	35.12	32.50
0.094"	0.0075"	0.195"	0.18"	FG31563694PRAC5	35.12	32.50
0.094"	0.0075"	0.195"	0.18"	FG31563694PLAC5	35.12	32.50
1/8"	0.0075"	0.195"	0.18"	FG31563825PRAC5	35.12	32.50
1/8"	0.0075"	0.195"	0.18"	FG31028880	35.12	32.50
1/8"	0.0075"	0.255"	0.29"	FG31030570	50.56	46.00
1/8"	0.0075"	0.255"	0.29"	FG31030510	50.56	46.00

CARBIDE

WIDIA High-Performance Solid Carbide 4 Flute Ball Nose End Mills - VariMill™



VariMill I™ - Series 4V00 - Inch

- AlTiN Coated
- Unequal flute spacing.
- Center cutting.
- Applicable in steel, stainless steel, cast iron, hardened steels and titanium
- Single tool for both roughing and finishing operations requiring fewer setups.

Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	Depth of Cut Maximum (APMX)	Shank Type	Order No.	Regular Price	SALE
1/8"	1/8"	2"	1/2"	Round	WK405576655	46.74	39.78
3/16"	3/16"	2-1/4"	5/8"	Round	WK405576656	52.21	44.35
5/16"	5/16"	2-1/2"	3/4"	Round	WK405576659	87.97	74.40
1/4"	1/4"	2-1/2"	3/4"	Round	WK405576658	72.84	61.71
03/8"	3/8"	2-1/2"	7/8"	Round	WK405576660	108.57	91.75
1/2"	1/2"	3"	1-1/4"	Weldon	WK405576663	173.17	146.07
1/2"	1/2"	3"	1"	Weldon	WK405576662	173.17	146.07
5/8"	5/8"	3-1/2"	1-1/4"	Weldon	WK405576664	328.46	276.62
3/4"	3/4"	4"	1-1/2"	Weldon	WK405576665	460.3	387.47
1"	1"	4"	1-1/2"	Weldon	WK405576666	678.63	571.01
1-1/4"	1-1/4"	5"	2-1/4"	Weldon	WK405576667	1017.94	856.15

29415

WIDIA Solid Carbide Varimill GP Ball Nose End Mills



2 Flute - TiAlN Coated

- Center cutting
- Cylindrical shanks
- TiAlN coated for longer tool life

Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Depth of Cut Maximum (APMX)	Overall Length (OAL)	Order No.	Regular Price	SALE
1/16"	1/8"	3/16"	1-1/2"	WK405878173	22.39	19.18
1/8"	1/8"	1/2"	1-1/2"	WK405878180	21.88	18.77
3/16"	3/16"	5/8"	2"	WK405878186	27.56	23.51
3/16"	3/16"	1"	4"	WK405878188	49.65	41.88
1/4"	1/4"	1/2"	2"	WK405878190	31.99	27.20
1/4"	1/4"	3/4"	2-1/2"	WK405878191	37.56	31.82
3/8"	3/8"	7/8"	2-1/2"	WK405878200	61.44	51.73
1/2"	1/2"	1"	3"	WK405878207	104.75	87.86

10697

WIDIA Solid Carbide Varimill GP Ball Nose End Mills



4 Flute - TiAlN Coated

- Center cutting
- Cylindrical shanks
- TiAlN coated for longer tool life

Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Depth of Cut Maximum (APMX)	Overall Length (OAL)	Order No.	Regular Price	SALE
1/32"	1/8"	5/64"	1-1/2"	WK405825624	25.82	22.06
3/64"	1/8"	1/8"	1-1/2"	WK405825625	25.82	22.06
1/16"	1/8"	3/16"	1-1/2"	WK405825626	22.39	19.18
3/32"	1/8"	3/16"	1-1/2"	WK405825628	19.23	16.52
3/32"	1/8"	3/8"	1-1/2"	WK405825643	23.7	20.31
1/8"	1/8"	1/4"	1-1/2"	WK405825646	18.83	16.20
1/8"	1/8"	1/2"	1-1/2"	WK405825647	21.88	18.77
1/8"	1/8"	3/4"	2-1/4"	WK405825648	30.55	25.95
1/8"	1/8"	3/4"	3"	WK405825649	33.79	28.64
5/32"	3/16"	9/16"	2"	WK405825652	30.24	25.76
3/16"	3/16"	5/16"	1-1/2"	WK405825654	23.66	20.21
3/16"	3/16"	5/8"	2"	WK405825655	27.56	23.51
3/16"	3/16"	3/4"	2-1/2"	WK405825656	40.8	34.48
3/16"	3/16"	1"	4"	WK405825657	49.65	41.88
7/32"	1/4"	5/8"	2-1/2"	WK405825659	38.85	32.95
1/4"	1/4"	1/2"	2"	WK405825661	31.99	27.20
1/4"	1/4"	3/4"	2-1/2"	WK405825663	37.56	31.82
1/4"	1/4"	1-1/8"	3"	WK405825664	41.22	34.89
1/4"	1/4"	1-1/2"	4"	WK405825665	46.14	39.00
5/16"	5/16"	13/16"	2-1/2"	WK405825670	50.91	42.90
3/8"	3/8"	1"	2-1/2"	WK405825684	61.44	51.73
3/8"	3/8"	1"	4"	WK405825685	90.93	76.36
3/8"	3/8"	1-1/8"	3"	WK405825686	80.82	67.85
3/8"	3/8"	1-1/2"	6"	WK405825687	101.32	84.98
1/2"	1/2"	1"	3"	WK405825689	104.75	87.86
1/2"	1/2"	1"	4"	WK405825690	123.79	103.68
1/2"	1/2"	1-1/2"	6"	WK405825691	167.34	140.00
1/2"	1/2"	2"	4"	WK405825692	123.79	103.68
5/8"	5/8"	1-1/4"	3-1/2"	WK405825697	166.75	139.49
3/4"	3/4"	1"	3"	WK405825700	222.83	186.31
3/4"	3/4"	1-1/2"	4"	WK405825711	239.12	199.85

10701

INTERNAL TOOL Max Groove Carbide

Grooving Tools



- Solid micrograin carbide
- For retaining ring grooves and internal reliefs
- An elliptical neck for greater strength
- Altin coated for a longer life
- Top rake for maximum shearing with a better finish
- All shanks have lockdown flat for faster setups
- Minimum bore +.000/-0.005

Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	Cutting Width (CW)	Minimum Bore Diameter (DMIN)	Cutting Length	Cutting Depth Maximum (CDX)	Order No.	Reg-ular Price	SALE
1/4"	2-1/2"	0.017" / 0.018"	1/4"	0.050"	1/4"	GE97221100	63.62	58.46
1/4"	2-1/2"	0.017" / 0.018"	1/4"	0.050"	3/8"	GE97221105	63.62	58.46
1/4"	2-1/2"	0.017" / 0.018"	1/4"	0.050"	1/2"	GE97221110	63.62	58.46
1/4"	2-1/2"	0.017" / 0.018"	1/4"	0.050"	5/8"	GE97221115	63.62	58.46
1/4"	2-1/2"	0.025" / 0.026"	1/4"	0.050"	1/4"	GE97221120	63.62	58.46
1/4"	2-1/2"	0.025" / 0.026"	1/4"	0.050"	3/8"	GE97221125	63.62	58.46
1/4"	2-1/2"	0.025" / 0.026"	1/4"	0.050"	1/2"	GE97221130	63.62	58.46
1/4"	2-1/2"	0.025" / 0.026"	1/4"	0.050"	5/8"	GE97221135	63.62	58.46
1/4"	2-1/2"	0.030" / 0.031"	1/4"	0.050"	1/4"	GE97221140	63.62	58.46
1/4"	2-1/2"	0.030" / 0.031"	1/4"	0.050"	3/8"	GE97221145	63.62	58.46
1/4"	2-1/2"	0.030" / 0.031"	1/4"	0.050"	1/2"	GE97221150	63.62	58.46
1/4"	2-1/2"	0.030" / 0.031"	1/4"	0.050"	5/8"	GE97221155	63.62	58.46
1/4"	2-1/2"	0.062" / 0.064"	1/4"	0.050"	1/4"	GE97221160	63.62	58.46
1/4"	2-1/2"	0.062" / 0.064"	1/4"	0.050"	3/8"	GE97221165	63.62	58.46
1/4"	2-1/2"	0.062" / 0.064"	1/4"	0.050"	1/2"	GE97221170	63.62	58.46
1/4"	2-1/2"	0.062" / 0.064"	1/4"	0.050"	5/8"	GE97221175	63.62	58.46
1/4"	2-1/2"	0.093" / 0.095"	1/4"	0.050"	1/4"	GE97221180	63.62	58.46
1/4"	2-1/2"	0.093" / 0.095"	1/4"	0.050"	3/8"	GE97221185	63.62	58.46
1/4"	2-1/2"	0.093" / 0.095"	1/4"	0.050"	1/2"	GE97221190	63.62	58.46
1/4"	2-1/2"	0.093" / 0.095"	1/4"	0.050"	5/8"	GE97221195	63.62	58.46
1/4"	2-1/2"	0.125" / 0.127"	1/4"	0.050"	1/4"	GE97221200	63.62	58.46
1/4"	2-1/2"	0.125" / 0.127"	1/4"	0.050"	3/8"	GE97221205	63.62	58.46
1/4"	2-1/2"	0.125" / 0.127"	1/4"	0.050"	1/2"	GE97221210	63.62	58.46
1/4"	2-1/2"	0.125" / 0.127"	1/4"	0.050"	5/8"	GE97221215	63.62	58.46
5/16"	2-1/2"	0.033" / 0.034"	0.312"	0.100"	1/4"	GE97221220	79.4	72.96
5/16"	2-1/2"	0.033" / 0.034"	0.312"	0.100"	3/8"	GE97221225	79.4	72.96
5/16"	2-1/2"	0.033" / 0.034"	0.312"	0.100"	1/2"	GE97221230	79.4	72.96
5/16"	2-1/2"	0.033" / 0.034"	0.312"	0.100"	5/8"	GE97221235	79.4	72.96
5/16"	2-1/2"	0.038" / 0.039"	0.312"	0.100"	1/4"	GE97221240	79.4	72.96
5/16"	2-1/2"	0.038" / 0.039"	0.312"	0.100"	3/8"	GE97221245	79.4	72.96
5/16"	2-1/2"	0.038" / 0.039"	0.312"	0.100"	1/2"	GE97221250	79.4	72.96
5/16"	2-1/2"	0.038" / 0.039"	0.312"	0.100"	5/8"	GE97221255	79.4	72.96
5/16"	2-1/2"	0.062" / 0.064"	0.312"	0.100"	1/2"	GE97221260	79.4	72.96
5/16"	2-1/2"	0.062" / 0.064"	0.312"	0.100"	3/4"	GE97221265	79.4	72.96
5/16"	2-1/2"	0.062" / 0.064"	0.312"	0.100"	1"	GE97221270	79.4	72.96
5/16"	2-1/2"	0.093" / 0.095"	0.312"	0.100"	1/2"	GE97221275	79.4	72.96
5/16"	2-1/2"	0.093" / 0.095"	0.312"	0.100"	3/4"	GE97221280	79.4	72.96
5/16"	2-1/2"	0.093" / 0.095"	0.312"	0.100"	1"	GE97221285	79.4	72.96
5/16"	2-1/2"	0.125" / 0.127"	0.312"	0.100"	1/2"	GE97221290	79.4	72.96
5/16"	2-1/2"	0.125" / 0.127"	0.312"	0.100"	3/4"	GE97221295	79.4	72.96
5/16"	2-1/2"	0.125" / 0.127"	0.312"	0.100"	1"	GE97221300	79.4	72.96
3/8"	2-1/2"	0.039" / 0.041"	3/8"	0.100"	1/4"	GE97221305	104.55	96.08
3/8"	2-1/2"	0.039" / 0.041"	3/8"	0.100"	3/8"	GE97221310	104.55	96.08
3/8"	2-1/2"	0.039" / 0.041"	3/8"	0.100"	1/2"	GE97221315	104.55	96.08
3/8"	2-1/2"	0.039" / 0.041"	3/8"	0.100"	3/4"	GE97221320	104.55	96.08
3/8"	2-1/2"	0.039" / 0.041"	3/8"	0.100"	1"	GE97221325	104.55	96.08
3/8"	2-1/2"	0.039" / 0.041"	3/8"	0.100"	1-1/4"	GE97221330	104.55	96.08
3/8"	2-1/2"	0.046" / 0.048"	3/8"	0.100"	1/4"	GE97221335	104.55	96.08
3/8"	2-1/2"	0.046" / 0.048"	3/8"	0.100"	3/8"	GE97221340	104.55	96.08
3/8"	2-1/2"	0.046" / 0.048"	3/8"	0.100"	1/2"	GE97221345	104.55	96.08
3/8"	2-1/2"	0.046" / 0.048"	3/8"	0.100"	3/4"	GE97221350	104.55	96.08
3/8"	2-1/2"	0.046" / 0.048"	3/8"	0.100"	1"	GE97221355	104.55	96.08

Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	Cutting Width (CW)	Minimum Bore Diameter (DMIN)	Cutting Length	Cutting Depth Maximum (CDX)	Order No.	Reg-ular Price	SALE
3/8"	2-1/2"	0.046" / 0.048"	3/8"	0.100"	1-1/4"	GE97221360	104.55	96.08
3/8"	2-1/2"	0.055" / 0.057"	3/8"	0.100"	1/4"	GE97221365	104.55	96.08
3/8"	2-1/2"	0.055" / 0.057"	3/8"	0.100"	3/8"	GE97221370	104.55	96.08
3/8"	2-1/2"	0.055" / 0.057"	3/8"	0.100"	1/2"	GE97221375	104.55	96.08
3/8"	2-1/2"	0.055" / 0.057"	3/8"	0.100"	3/4"	GE97221380	104.55	96.08
3/8"	2-1/2"	0.055" / 0.057"	3/8"	0.100"	1"	GE97221385	104.55	96.08
3/8"	2-1/2"	0.055" / 0.057"	3/8"	0.100"	1-1/4"	GE97221390	104.55	96.08
3/8"	2-1/2"	0.062" / 0.064"	3/8"	0.100"	1/4"	GE97221395	104.55	96.08
3/8"	2-1/2"	0.062" / 0.064"	3/8"	0.100"	3/8"	GE97221400	104.55	96.08
3/8"	2-1/2"	0.062" / 0.064"	3/8"	0.100"	1/2"	GE97221405	104.55	96.08
3/8"	2-1/2"	0.062" / 0.064"	3/8"	0.100"	3/4"	GE97221410	104.55	96.08
3/8"	2-1/2"	0.062" / 0.064"	3/8"	0.100"	1"	GE97221415	104.55	96.08
3/8"	2-1/2"	0.062" / 0.064"	3/8"	0.100"	1-1/4"	GE97221420	104.55	96.08
3/8"	2-1/2"	0.069" / 0.071"	3/8"	0.100"	1/4"	GE97221425	104.55	96.08
3/8"	2-1/2"	0.069" / 0.071"	3/8"	0.100"	3/8"	GE97221430	104.55	96.08
3/8"	2-1/2"	0.069" / 0.071"	3/8"	0.100"	1/2"	GE97221435	104.55	96.08
3/8"	2-1/2"	0.069" / 0.071"	3/8"	0.100"	3/4"	GE97221440	104.55	96.08
3/8"	2-1/2"	0.069" / 0.071"	3/8"	0.100"	1"	GE97221445	104.55	96.08
3/8"	2-1/2"	0.069" / 0.071"	3/8"	0.100"	1-1/4"	GE97221450	104.55	96.08
3/8"	2-1/2"	0.087" / 0.089"	3/8"	0.100"	1/4"	GE97221455	104.55	96.08
3/8"	2-1/2"	0.087" / 0.089"	3/8"	0.100"	3/8"	GE97221460	104.55	96.08
3/8"	2-1/2"	0.087" / 0.089"	3/8"	0.100"	1/2"	GE97221465	104.55	96.08
3/8"	2-1/2"	0.087" / 0.089"	3/8"	0.100"	3/4"	GE97221470	104.55	96.08
3/8"	2-1/2"	0.087" / 0.089"	3/8"	0.100"	1"	GE97221475	104.55	96.08
3/8"	2-1/2"	0.087" / 0.089"	3/8"	0.100"	1-1/4"	GE97221480	104.55	96.08
3/8"	2-1/2"	0.093" / 0.095"	3/8"	0.100"	1/2"	GE97221485	104.55	96.08
3/8"	2-1/2"	0.093" / 0.095"	3/8"	0.100"	3/4"	GE97221490	104.55	96.08
3/8"	2-1/2"	0.093" / 0.095"	3/8"	0.100"	1"	GE97221495	104.55	96.08
3/8"	2-1/2"	0.125" / 0.127"	3/8"	0.100"	1/2"	GE97221500	104.55	96.08
3/8"	2-1/2"	0.125" / 0.127"	3/8"	0.100"	3/4"	GE97221505	104.55	96.08
3/8"	2-1/2"	0.125" / 0.127"	3/8"	0.100"	1"	GE97221510	104.55	96.08
1/2"	3"	0.062" / 0.064"	1/2"	0.150"	1/2"	GE97221515	140.31	123.63
1/2"	3"	0.062" / 0.064"	1/2"	0.150"	3/4"	GE97221520	140.31	123.63
1/2"	3"	0.062" / 0.064"	1/2"	0.150"	1"	GE97221525	140.31	123.63
1/2"	3"	0.062" / 0.064"	1/2"	0.150"	1-1/4"	GE97221530	140.31	123.63
1/2"	3"	0.062" / 0.064"	1/2"	0.150"	1-1/2"	GE97221535	140.31	123.63
1/2"	3"	0.093" / 0.095"	1/2"	0.150"	1/2"	GE97221540	140.31	123.63
1/2"	3"	0.093" / 0.095"	1/2"	0.150"	3/4"	GE97221545	140.31	123.63
1/2"	3"	0.093" / 0.095"	1/2"	0.150"	1"	GE97221550	140.31	123.63
1/2"	3"	0.093" / 0.095"	1/2"	0.150"	1-1/4"	GE97221555	140.31	123.63
1/2"	3"	0.093" / 0.095"	1/2"	0.150"	1-1/2"	GE97221560	140.31	123.63
1/2"	3"	0.125" / 0.127"	1/2"	0.150"	1/2"	GE97221565	140.31	123.63
1/2"	3"	0.125" / 0.127"	1/2"	0.150"	3/4"	GE97221570	140.31	123.63
1/2"	3"	0.125" / 0.127"	1/2"	0.150"	1"	GE97221575	140.31	123.63
1/2"	3"	0.125" / 0.127"	1/2"	0.150"	1-1/4"	GE97221580	140.31	123.63
1/2"	3"	0.125" / 0.127"	1/2"	0.150"	1-1/2"	GE97221585	140.31	123.63
1/2"	3"	0.156" / 0.158"	1/2"	0.150"	1/2"	GE97221590	140.31	123.63
1/2"	3"	0.156" / 0.158"	1/2"	0.150"	3/4"	GE97221595	140.31	123.63
1/2"	3"	0.156" / 0.158"	1/2"	0.150"	1"	GE97221600	140.31	123.63
1/2"	3"	0.156" / 0.158"	1/2"	0.150"	1-1/4"	GE97221605	140.31	123.63
1/2"	3"	0.156" / 0.158"	1/2"	0.150"	1-1/2"	GE97221610	140.31	123.63
1/2"	3"	0.187" / 0.189"	1/2"	0.150"	1/2"	GE97221615	140.31	123.63
1/2"	3"	0.187" / 0.189"	1/2"	0.150"	3/4"	GE97221620	140.31	123.63
1/2"	3"	0.187" / 0.189"	1/2"	0.150"	1"	GE97221625	140.31	123.63
1/2"	3"	0.187" / 0.189"	1/2"	0.150"	1-1/4"	GE97221630	140.31	123.63
1/2"	3"	0.187" / 0.189"	1/2"	0.150"	1-1/2"	GE97221635	140.31	123.63
1/2"	3"	0.250" / 0.252"	1/2"	0.150"	1/2"	GE97221640	140.31	123.63
1/2"	3"	0.250" / 0.252"	1/2"	0.150"	3/4"	GE97221645	140.31	123.63
1/2"	3"	0.250" / 0.252"	1/2"	0.150"	1"	GE97221650	140.31	123.63
1/2"	3"	0.250" / 0						

CUTTING TOOLS

Severance Carbide Inside Deburring Cutters

Shear Tooth Design



- For general purpose light deburring applications
- Multi-flute design is self piloting
- May be reground many times
- One tool can deburr many different hole diameters
- Large variety of shanks available
- Noses all come to a point
- Furnished in 60° and 90° angles
- The sectional shear-tooth pattern on these cutters is intended for deburring only
- For heavy chamfering, use chatterless countersinks
- 3/32 thru 1/4" are solid carbide and double end, 5/16 thru 1" are solid carbide heads brazed to hardened alloy precision ground shanks and single end

Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	90 Degrees			60 Degrees		
			Order No.	Reg-ular Price	SALE	Order No.	Reg-ular Price	SALE
3/32"	3/32"	1-1/2"	BC5420680	20.79	18.70	BC5420620	20.79	18.70
1/8"	1/8"	1-1/2"	BC5422249	27.08	24.40	BC5422250	27.08	24.40
3/16"	3/16"	2"	BC5420682	40.13	36.10	BC5420622	40.13	36.10
1/4"	1/4"	2"	BC5422412	51.13	46.00	BC5422411	51.13	46.00
5/16"	1/4"	2-1/4"	BC5420688	52.25	47.00	BC5420628	52.25	47.00
3/8"	1/4"	2-1/4"	BC5420689	55.82	50.20	BC5420629	55.82	50.20
1/2"	1/4"	2-1/4"	BC5420693	59.10	53.20	BC5420633	59.10	53.20
1/2"	3/8"	2-1/8"	BC5420694	59.10	53.20	BC5420634	59.10	53.20
5/8"	1/4"	2-3/8"	BC5420699	65.44	58.90	BC5420639	65.44	58.90
5/8"	3/8"	2-3/8"	BC5420700	65.44	58.90	BC5420640	65.44	58.90
3/4"	1/2"	2-11/16"	BC5420704	109.97	99.00	BC5420644	109.97	99.00
1"	1/2"	2-13/16"	BC5420710	219.99	198.00	BC5420650	219.99	198.00

10572

IRWIN Hanson 10 Pc. Screw Extractor & Cobalt Drill Set

- Removes bolts & screws from 3/32 thru 5/8 and 2-5mm thru 16mm
- Comes with 5 left hand drill bits
- Sturdy metal case



Number of Pieces	Set Includes	Case Type	Order No.	Regular Price	SALE
10	Right Hand Cobalt Drills	Blister Pack	EW5111117	70.66	63.60
10	Left Hand Cobalt Drills	Blister Pack	EW5111119	100.02	90.00

6715

KEO Center Drills

Plain Type 60°



- Right hand
- High speed steel

Size	Drill Bit Size / Cutting Diameter (DC)	Overall Length (OAL)	Order No.	Regular Price	SALE
#0	1/32"	1-1/4"	AV4210032	13.56	12.44
#1	1/8"	1-1/4"	AV4110100	9.46	7.96
#2	3/16"	1-7/8"	AV4110200	9.88	7.99
#3	1/4"	2"	AV4110300	10.29	7.50
#4	5/16"	2-1/8"	AV4110400	10.61	9.08
#4.5	3/8"	2-1/2"	AV4114500	14.65	12.51
#5	7/16"	2-3/4"	AV4110500	16.86	13.72
#6	1/2"	3"	AV4110600	25.33	20.57
#7	5/8"	3-1/4"	AV4110700	38.39	31.97
#8	3/4"	3-1/2"	AV4110800	52.76	43.46
#9	7/8"	3-5/8"	AV4110900	95.72	78.97
#10	1"	3-3/4"	AV4111000	125.65	104.09

22469

PRO-CUT Combined Drills & Countersinks

High Speed Steel

- 60° Included angle



Size	Drill Bit Size / Cutting Diameter (DC)	Overall Length (OAL)	Order No.	Regular Price	SALE
#1	1/8"	1-1/4"	AV501	3.23	2.96
#2	3/16"	1-7/8"	AV502	3.62	3.29
#3	1/4"	2"	AV503	3.71	3.47
#4	5/16"	2-1/8"	AV504	3.34	3.18
#5	7/16"	2-3/4"	AV505	8.04	6.95
#6	1/2"	3"	AV506	10.64	9.95
#7	5/8"	3-1/4"	AV507	14.73	12.95
#8	3/4"	3-1/2"	AV508	19.18	16.00

22466

PRO-CUT Corner Rounding End Mill Sets

High Speed Steel & Cobalt - 8 Pc. Sets



Diameter Range	Cutting Edge Material	Order No.	Regular Price	SALE
1/16R x 3/8" 3/32R x 3/8" 1/8"R x 1/2" 5/32R x 1/2" 3/16"R x 1/2" 1/4"R x 1/2" 5/16"R x 1/2" 3/8"R x 1/2"	HSS	DK50RC	369.52	193.60
3/16"R x 3/4" 1/4"R x 3/4" 5/16"R x 3/4" 3/8"R x 3/4" 7/16R x 3/4" 1/2"R x 3/4" 5/8"R x 3/4" 3/4"R x 3/4"	HSS	DK50RC34	736.88	385.10
1/16R x 3/8" 3/32R x 3/8" 1/8"R x 1/2" 5/32R x 1/2" 3/16"R x 1/2" 1/4"R x 1/2" 5/16"R x 1/2" 3/8"R x 1/2"	HSSCo	DK55RC-CO	429.78	409.30

† Has 3/4" shanks

10300

HeliCoil Inch Thread Repair Kits

- Quickly and permanently restore stripped, worn or damaged threads to their original size and condition
- Damaged threads can be restored to better than new condition
- Increase your repair capabilities and restore parts that otherwise would have to be scrapped



Insert Thread Size	Order No.	Regular Price	SALE
#4	EX70540104	87.68	83.30
#5	EX70540105	139.80	132.80
#6	EX70540106	87.65	83.30
#8	EX7054012	88.17	83.80
#10	EX7054013	82.41	78.30
#12	EX7054011	83.31	79.10
1/4"	EX7054014	85.02	80.80
5/16"	EX7054015	88.53	84.10
3/8"	EX7054016	90.28	85.80
7/16"	EX7054017	95.54	90.80
1/2"	EX7054018	135.90	129.10
9/16"	EX7054019	189.58	180.10
5/8"	EX70540110	194.33	184.60
3/4"	EX70540112	227.47	216.10
7/8"	EX70552114	298.31	283.40
1"	EX70552116	440.32	418.30
1 1/8"	EX70552118	552.36	524.70
1 1/4"	EX70552120	544.43	517.20
1 3/8"	EX70552122	591.85	562.30
1 1/2"	EX70552124	639.18	607.20
#6	EX70540206	139.80	132.80
#8	EX7054022	288.81	225.96
#10	EX7054023	92.03	87.40
1/4"	EX7054024	94.66	89.90
5/16"	EX7054025	121.34	115.30
3/8"	EX7054026	103.43	98.30
7/16"	EX7054027	108.73	103.30
1/2"	EX7054028	149.01	141.60
9/16"	EX7054029	251.80	239.20
5/8"	EX70540210	213.30	202.60
3/4"	EX70540212	246.40	234.10
7/8"	EX70552814	435.63	413.80
1"	EX70552816	801.83	640.64
1"	EX70552816	568.17	539.80
1 1/8"	EX70552818	710.19	674.70
1 1/4"	EX70552820	733.84	697.10
1 3/8"	EX70552822	804.95	764.70
1 1/2"	EX70552824	852.23	809.60

9761

HeliCoil Metric Thread Repair Kits

HeliCoil Inserts quickly and permanently restore stripped, worn or damaged threads to their original size and condition. Damaged threads can be restored to better than new condition. Increase your repair capabilities and restore parts that otherwise would have to be scrapped.



Insert Thread Size	Order No.	Regular Price	SALE
M3	EX7054033	139.80	132.80
M4	EX7054034	88.17	83.80
M5	EX7054035	89.12	84.70
M6	EX7054036	84.15	79.90
M7	EX7054037	85.48	81.20
M8	EX7054038	85.48	81.20
M10	EX70540310	102.98	97.80
M12	EX70540312	116.07	110.30
M14	EX70540314	203.79	193.60
M16	EX70540316	227.47	216.10
M18	EX70540318	269.89	256.40
M20	EX70540320	298.31	283.40
M8	EX7054048	157.95	150.10
M10	EX70540410	157.95	150.10
M10	EX70540510	241.58	229.50
M12	EX70540512	157.95	150.10
M12	EX70540612	157.95	150.10
M14	EX70540614	241.58	229.50
M16	EX70540616	246.23	233.90
M18	EX70540618	304.27	289.10

9764

Deburring Tools

Front/Rear Cutting or Rear Cutting Only



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

Hole Diameter	Overall Length (OAL)	Depth	Pilot Length	Shank Length (LS)	Front/Rear Cutting			Rear Cutting Only		
					Order No.	Reg-ular Price	SALE	Order No.	Reg-ular Price	SALE
0.093"	3-3/8"	7/16"	1-1/4"	1"	EB72EZO09302	122.93	121.66	EB72EZO09308	122.93	121.66
0.098"	3-3/8"	7/16"	1-1/4"	1"	EB72EZO09802	122.93	121.66	EB72EZO09808	122.93	121.66
0.102"	3-3/8"	7/16"	1-1/4"	1"	EB72EZO10202	122.93	121.66	EB72EZO10208	122.93	121.66
0.109"	3-3/8"	7/16"	1-1/4"	1"	EB72EZO10902	122.93	121.66	EB72EZO10908	122.93	121.66
0.118"	3-3/8"	7/16"	1-1/4"	1"	EB72EZO11802	122.93	121.66	EB72EZO11808	122.93	121.66
1/8"	3-3/8"	7/16"	1-1/4"	1"	EB72EZO12502	122.93	121.66	EB72EZO12508	122.93	121.66
0.133"	3-3/8"	7/16"	1-1/4"	1"	EB72EZO13302	122.93	121.66	EB72EZO13308	122.93	121.66
0.14"	3-3/8"	7/16"	1-1/4"	1"	EB72EZO14002	122.93	121.66	EB72EZO14008	122.93	121.66
0.149"	3-3/8"	7/16"	1-1/4"	1"	EB72EZO14902	122.93	121.66	EB72EZO14908	122.93	121.66
0.156"	4-1/2"	33/64"	1-3/4"	1-5/16"	EB72EZO15602	111.14	109.48	EB72EZO15608	111.14	109.48
0.157"	4-1/2"	33/64"	1-3/4"	1-5/16"	EB72EZO15702	111.13	109.46	EB72EZO15708	111.14	109.48
0.177"	4-1/2"	33/64"	1-3/4"	1-5/16"	EB72EZO17702	111.14	109.48	EB72EZO17708	111.14	109.48
0.187"	4-1/2"	33/64"	1-3/4"	1-5/16"	EB72EZO18702	111.14	109.48	EB72EZO18708	111.14	109.48
0.196"	4-1/2"	33/64"	1-3/4"	1-5/16"	EB72EZO19602	111.14	109.48	EB72EZO19608	111.14	109.48
0.216"	4-1/2"	33/64"	1-3/4"	1-5/16"	EB72EZO21602	111.14	109.48	EB72EZO21608	111.14	109.48
0.218"	4-1/2"	33/64"	1-3/4"	1-5/16"	EB72EZO21802	111.14	109.48	EB72EZO21808	111.14	109.48
0.236"	4-1/2"	33/64"	1-3/4"	1-5/16"	EB72EZO23602	111.14	109.48	EB72EZO23608	111.14	109.48
1/4"	5"	11/16"	2"	1-1/4"	-	-	-	EB72EZO25008	113.15	111.50
0.255"	5"	11/16"	2"	1-1/4"	EB72EZO25502	141.45	135.80	EB72EZO25508	113.15	111.50
0.275"	5"	11/16"	2"	1-1/4"	EB72EZO27502	109.77	104.70	EB72EZO27508	113.15	111.50
0.295"	5"	11/16"	2"	1-1/4"	EB72EZO29502	113.15	111.50	EB72EZO29508	113.15	111.50
0.312"	5"	11/16"	2"	1-1/4"	-	-	-	EB72EZO31208	113.15	111.50
0.314"	5"	11/16"	2"	1-1/4"	EB72EZO31402	113.15	111.50	EB72EZO31408	113.15	111.50
0.334"	5"	11/16"	2"	1-1/4"	EB72EZO33402	113.15	111.50	EB72EZO33408	113.15	111.50
0.343"	5"	11/16"	3-3/4"	1-1/4"	EB72EZO34302	116.82	115.34	EB72EZO34308	116.82	115.34
0.354"	5"	11/16"	3-3/4"	1-1/4"	EB72EZO35402	116.82	115.34	EB72EZO35408	116.82	115.34
0.374"	5"	11/16"	3-3/4"	1-1/4"	EB72EZO37402	116.82	115.34	EB72EZO37408	116.82	115.34
3/8"	5"	11/16"	3-3/4"	1-1/4"	-	-	-	EB72EZO37508	116.82	115.34
0.393"	5"	11/16"	3-3/4"	1-1/4"	EB72EZO39302	120.49	119.08	EB72EZO39308	120.49	119.08
0.433"	5"	11/16"	3-3/4"	1-1/4"	EB72EZO43302	120.49	119.08	EB72EZO43308	120.49	119.08
0.437"	5"	11/16"	3-3/4"	1-1/4"	EB72EZO43702	120.49	119.08	EB72EZO43708	120.49	119.08
0.453"	5"	11/16"	3-3/4"	1-1/4"	EB72EZO45302	127.41	126.22	EB72EZO45308	127.41	126.22
0.472"	5"	11/16"	3-3/4"	1-1/4"	EB72EZO47202	127.41	126.22	EB72EZO47208	127.41	126.22
0.492"	5"	11/16"	3-3/4"	1-1/4"	EB72EZO49202	127.41	126.22	EB72EZO49208	127.41	126.22
1/2"	5"	11/16"	3-3/4"	1-1/4"	EB72EZO50002	127.41	126.22	EB72EZO50008	127.41	126.22
0.511"	6-1/2"	11/16"	4-1/2"	2"	EB72EZO51102	148.57	148.04	EB72EZO51108	148.57	148.04
0.531"	6-1/2"	11/16"	4-1/2"	2"	EB72EZO53102	148.57	148.04	EB72EZO53108	148.57	148.04
0.551"	6-1/2"	11/16"	4-1/2"	2"	EB72EZO55102	148.57	148.04	EB72EZO55108	148.57	148.04
0.57"	6-1/2"	11/16"	4-1/2"	2"	EB72EZO57002	158.74	158.48	EB72EZO57008	158.74	158.48
0.59"	6-1/2"	11/16"	4-1/2"	2"	EB72EZO59002	158.74	158.48	EB72EZO59008	158.74	158.48
0.61"	6-1/2"	11/16"	4-1/2"	2"	EB72EZO61002	158.74	158.48	EB72EZO61008	158.74	158.48
5/8"	6-1/2"	11/16"	4-1/2"	2"	EB72EZO62502	158.74	158.48	EB72EZO62508	158.74	158.48
0.629"	6-1/2"	11/16"	4-1/2"	2"	EB72EZO62902	167.71	167.70	EB72EZO62908	167.71	167.70
0.649"	6-1/2"	11/16"	4-1/2"	2"	EB72EZO64902	167.71	167.70	EB72EZO64908	167.71	167.70
0.669"	6-1/2"	11/16"	4-1/2"	2"	EB72EZO66902	167.71	167.70	EB72EZO66908	167.71	167.70
0.708"	7"	11/16"	5"	2"	EB72EZO70802	201.48	200.40	EB72EZO70808	201.48	200.40
0.748"	7"	11/16"	5"	2"	EB72EZO74802	201.48	200.40	EB72EZO74808	201.48	200.40
3/4"	7"	11/16"	5"	2"	EB72EZO75002	201.48	200.40	EB72EZO75008	201.48	200.40

22330

CUTTING TOOLS

IMCO M924 Solid Carbide 4 Flute Corner Radius End Mills

POW•R•FEED Series M924 End Mills



IMCO's M924 is the second generation of the POW•R•FEED M9 series, designed for production environments.

Reinforced cutting edges give you even longer tool life in more demanding applications.

- New AlCrNX engineered coating shown to improve tools life exponentially
- Better performance, longer tool life with optimized rake and relief angles
- Plunge, slot, finish in all kinds of materials
- Cut wet or dry, depending on your tool path and the materials you're machining
- Maximum feeds and speeds you never thought possible

Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Usable Length (LU)	Overall Length (OAL)	Corner Radius (RE) - 0.015"			Corner Radius (RE) - 0.03"			Corner Radius (RE) - 0.06"		
				Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
1/8"	1/8"	-	1-1/2"	DD4167499	46.97	40.10	-	-	-	-	-	-
3/16"	3/16"	-	2"	DD4167511	63.05	56.20	-	-	-	-	-	-
1/4"	1/4"	-	2-1/2"	DD4167525	71.11	60.67	DD4167526	71.11	60.67	-	-	-
1/4"	1/4"	-	3"	DD4167531	83.88	71.49	DD4167532	83.88	71.49	-	-	-
1/4"	1/4"	-	4"	DD4167547	99.88	85.20	DD4167548	99.88	85.20	-	-	-
5/16"	5/16"	-	2-1/2"	DD4167099	88.55	75.51	DD4167100	88.55	75.51	-	-	-
3/8"	3/8"	-	3"	DD4167133	134.71	114.87	DD4167134	134.71	114.87	-	-	-
3/8"	3/8"	-	4"	DD4167165	166.13	141.66	DD4167166	166.13	141.66	-	-	-
1/2"	1/2"	-	2-1/2"	-	-	-	DD4167206	163.21	139.20	-	-	-
1/2"	1/2"	-	3"	DD4167214	165.45	141.06	DD4167215	165.45	141.06	DD4167216	165.45	141.06
1/2"	1/2"	-	3"	DD4167223	171.64	146.37	DD4167224	171.64	146.37	DD4167225	171.64	146.37
5/8"	5/8"	-	3"	-	-	-	DD4167278	260.83	222.48	-	-	-
5/8"	5/8"	-	3-1/2"	-	-	-	DD4167288	270.26	230.54	DD4167289	270.26	230.54
5/8"	5/8"	-	4"	-	-	-	DD4167298	324.37	276.69	DD4167299	324.37	276.69
3/4"	3/4"	-	4"	-	-	-	DD4167358	453.80	387.05	DD4167359	453.80	387.05
3/4"	3/4"	-	5"	-	-	-	DD4167368	518.42	442.08	-	-	-
1"	1"	-	4"	-	-	-	DD4167408	717.80	612.18	DD4167409	717.80	612.18

29997

IMCO OMEGA® M725 & M726 Solid Carbide 5 & 6 Flute End Mills

For Hard Materials • Square End



- Mills steels heat treated up to 58-62 HRC with or without coolant
- Optimized geometries, stronger cutting edges, superior balance
- 50° Helix creates a high shear plane for better efficiency and chip control
- AlTiN-X coating

Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Depth of Cut Maximum (APMX)	Overall Length (OAL)	Flute Count (NOF)	Order No.	Regular Price	SALE
1/8"	1/8"	1/2"	1-1/2"	5	DD4069052	44.47	26.86
1/8"	1/8"	1/4"	1-1/2"	5	DD4069050	43.68	26.83
3/16"	3/16"	5/16"	2"	5	DD4069054	51.68	32.00
3/16"	3/16"	9/16"	2"	5	DD4069056	52.84	32.00
1/4"	1/4"	3/4"	2-1/2"	6	DD4069058	69.33	55.34
1/4"	1/4"	1-1/4"	3"	6	DD4069061	84.63	64.21
3/8"	3/8"	7/8"	2-1/2"	6	DD4069070	109.69	67.11
3/8"	3/8"	1-1/4"	3"	6	DD4069073	137.43	83.63
3/8"	3/8"	2"	4"	6	DD4069076	173.36	105.31
1/2"	1/2"	1"	3"	6	DD4069079	159.51	97.04
1/2"	1/2"	1-1/4"	3"	6	DD4069083	165.50	101.16
1/2"	1/2"	1-5/8"	3-1/2"	6	DD4069087	209.38	126.99
5/8"	5/8"	1-3/8"	3-1/2"	6	DD4069099	288.07	175.48
3/4"	3/4"	1-5/8"	4"	6	DD4069111	461.78	279.79
3/4"	3/4"	2-5/8"	5"	6	DD4069115	570.29	345.87

22460

HSS M CP 2 Flute Single End Mills

High Speed Steel - Center Cutting

- Used for slotting operations in all types of materials



Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Depth of Cut Maximum (APMX)	Overall Length (OAL)	Order No.	Regular Price	SALE
1/8"	3/8"	3/8"	2-5/16"	MT2343651	24.62	23.40
5/32"	3/8"	7/16"	2-5/16"	MT2343691	30.62	28.40
3/16"	3/8"	7/16"	2-5/16"	MT2343652	29.00	27.00
13/64"	3/8"	7/16"	2-5/16"	MT2343706	28.15	26.30
7/32"	3/8"	1/2"	2-3/8"	MT2343692	26.01	24.50
15/64"	3/8"	1/2"	2-5/16"	MT2343707	33.93	31.10
1/4"	3/8"	1/2"	2-5/16"	MT2343653	43.59	39.10
17/64"	3/8"	9/16"	2-5/16"	MT2343708	26.91	25.30
9/32"	3/8"	9/16"	2-3/8"	MT2343693	27.58	25.80
5/16"	3/8"	9/16"	2-5/16"	MT2343654	29.69	27.60
21/64"	3/8"	9/16"	2-5/16"	MT2343710	28.15	26.30
11/32"	3/8"	9/16"	2-5/16"	MT2343694	34.81	31.80
11/64"	3/8"	7/16"	2-3/8"	MT2343705	28.29	26.40
3/8"	3/8"	9/16"	2-5/16"	MT2343655	43.59	39.10
23/64"	3/8"	9/16"	2-1/2"	MT2343711	26.91	25.30
25/64"	3/8"	13/16"	2-1/2"	MT2343712	41.55	37.40
13/32"	3/8"	13/16"	2-1/2"	MT2343695	41.10	37.00
27/64"	3/8"	13/16"	2-1/2"	MT2343713	43.09	38.70
7/16"	3/8"	13/16"	2-1/2"	MT2343656	39.81	36.00
15/32"	1/2"	13/16"	3"	MT2343696	41.55	37.40
1/2"	3/8"	13/16"	2-1/2"	MT2343657	31.06	28.70
1/2"	1"	3"	3"	MT2343658	37.63	34.10
31/64"	1/2"	13/16"	3-1/4"	MT2343715	41.55	37.40
33/64"	1/2"	1-1/8"	3"	MT2343716	53.04	46.90
17/32"	1/2"	1-1/8"	3-1/8"	MT2343697	57.63	50.70
35/64"	1/2"	1-1/8"	3-3/8"	MT2343717	50.97	45.20
9/16"	1/2"	1-1/8"	3-1/8"	MT2343659	56.23	49.50
37/64"	1/2"	1-1/8"	3-1/8"	MT2343718	50.97	45.20
19/32"	1/2"	1-1/8"	3-1/8"	MT2343698	56.08	49.40
39/64"	1/2"	1-1/8"	3-1/8"	MT2343719	50.97	45.20
19/64"	1/2"	9/16"	2-1/2"	MT2343709	36.68	33.40
5/8"	1/2"	1-1/8"	3-1/8"	MT2343660	55.49	48.90
5/8"	5/8"	1-5/16"	3-7/16"	MT2343661	52.05	46.10
11/16"	1/2"	1-5/16"	3-5/16"	MT2343662	70.69	61.50
11/16"	5/8"	1-5/16"	3-7/16"	MT2343663	70.79	61.60
3/4"	1/2"	1-5/16"	3-7/16"	MT2343664	59.86	52.60
3/4"	5/8"	1-5/16"	3-7/16"	MT2343665	66.89	58.40
3/4"	3/4"	1-5/16"	3-9/16"	MT2343666	63.21	55.30
13/16"	5/8"	1-1/2"	3-5/8"	MT2343667	80.51	69.70
13/16"	3/4"	1-1/2"	3-3/4"	MT2343668	79.19	68.60
7/8"	5/8"	1-1/2"	3-5/8"	MT2343669	86.52	74.60
7/8"	3/4"	1-1/2"	3-3/4"	MT2343670	81.53	70.50
7/8"	7/8"	1-1/2"	3-3/4"	MT2343671	81.57	70.50
15/16"	3/4"	1-1/2"	3-3/4"	MT2343673	98.02	84.20
15/16"	5/8"	1-1/2"	4"	MT2343672	93.47	80.40
15/16"	7/8"	1-1/2"	3-3/4"	MT2343674	81.12	70.20
1"	5/8"	1-1/2"	3-3/4"	MT2343675	110.44	94.40
1"	3/4"	1-1/2"	3-3/4"	MT2343676	116.04	99.10
1"	7/8"	1-1/2"	3-3/4"	MT2343677	109.92	94.00
1"	1"	1-5/8"	4-1/8"	MT2343678	110.79	94.70
1-1/8"	3/4"	1-1/2"	3-7/8"	MT2343720	119.90	102.30
1-1/8"	1"	1-5/8"	4-1/8"	MT2343680	142.16	120.70
1-1/8"	7/8"	1-5/8"	3-7/8"	MT2343679	125.40	106.80
1-1/4"	3/4"	1-1/2"	3-7/8"	MT2343721	130.92	111.40
1-1/4"	1"	1-5/8"	4-1/8"	MT2343682	130.92	111.40
1-1/4"	1-1/4"	1-5/8"	4-1/2"	MT2343683	147.00	124.70
1-3/8"	3/4"	1-1/2"	3-7/8"	MT2343722	158.09	133.90
1-3/8"	1"	1-5/8"	4-1/8"	MT2343684	242.81	204.00
1-1/2"	3/4"	1-1/2"	3-7/8"	MT2343723	168.56	142.60
1-1/2"	1-1/4"	1-5/8"	4-1/2"	MT2343686	207.66	174.90
1-1/2"	1"	1-5/8"	4-1/8"	MT2343685	243.49	204.60
1-5/8"	1-1/4"	1-5/8"	4-1/8"	MT2343687	235.96	198.40
1-7/8"	1-1/4"	1-5/8"	4-1/2"	MT2343689	266.59	223.70
1-3/4"	3/4"	1-1/2"	3-7/8"	MT2343724	200.97	169.40
1-3/4"	1-1/4"	1-5/8"	4-1/2"	MT2343688	214.83	180.90
2"	1-1/4"	1-5/8"	4-1/2"	MT2343690	357.28	298.80

WHITNEY TOOL Long Shank T-Slot Milling Cutters

- High speed steel or M42 cobalt
- Right hand cut
- Straight shank



Cutting Diameter (DC)	Cutting Width (CW)	Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	HSS			HSSCo		
				Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
1"	1/8"	5/8"	4-15/16"	DS9610294	196.70	188.02	DS9620294	253.93	247.10
1-1/2"	1/8"	1"	5-5/16"	DS9610308	304.09	298.81	DS9620308	390.61	388.16
1-1/4"	1/8"	3/4"	5-1/8"	DS9610301	262.05	255.49	DS9620301	317.65	312.81
1"	3/16"	5/8"	4-15/16"	DS9610295	196.70	188.02	DS9620295	253.93	247.10
1-1/2"	3/16"	1"	5-5/16"	DS9610309	304.09	298.81	DS9620309	390.61	388.16
1-1/4"	3/16"	3/4"	5-1/8"	DS9610302	262.05	255.49	DS9620302	317.65	312.81
2"	3/16"	1"	5-11/16"	DS9610315	514.27	512.75	DS9620315	605.63	601.26
1"	1/4"	5/8"	4-15/16"	DS9610296	196.70	188.02	DS9620296	253.93	247.10
1-1/2"	1/4"	1"	5-5/16"	DS9610310	304.09	298.81	DS9620310	390.61	388.16
1-1/4"	1/4"	3/4"	5-1/8"	DS9610303	262.05	255.49	DS9620303	317.65	312.81
2"	1/4"	1"	5-11/16"	DS9610316	514.27	512.75	DS9620316	605.63	601.26
1"	5/16"	5/8"	4-15/16"	DS9610297	196.70	188.02	DS9620297	253.93	247.10
1-1/2"	5/16"	1"	5-5/16"	DS9610311	304.09	298.81	DS9620311	390.61	388.16
1-1/4"	5/16"	3/4"	5-1/8"	DS9610304	262.05	255.49	DS9620304	317.65	312.81
2"	5/16"	1"	5-11/16"	DS9610317	514.27	512.75	DS9620317	605.63	601.26
1"	3/8"	5/8"	4-15/16"	DS9610298	196.70	188.02	DS9620298	253.93	247.10
1-1/2"	3/8"	1"	5-5/16"	DS9610312	304.09	298.81	DS9620312	390.61	388.16
1-1/4"	3/8"	3/4"	5-1/8"	DS9610305	262.05	255.49	DS9620305	317.65	312.81
2"	3/8"	1"	5-11/16"	DS9610318	514.27	512.75	DS9620318	605.63	601.26
1"	1/2"	5/8"	4-15/16"	DS9610299	196.70	188.02	DS9620299	253.93	247.10
1-1/2"	1/2"	1"	5-5/16"	DS9610313	304.09	298.81	DS9620313	390.61	388.16
1-1/4"	1/2"	3/4"	5-1/8"	DS9610306	262.05	255.49	DS9620306	317.65	312.81
2"	1/2"	1"	5-11/16"	DS9610319	514.27	512.75	DS9620319	605.63	601.26
1"	5/8"	5/8"	4-15/16"	DS9610300	196.70	188.02	DS9620300	253.93	247.10
1-1/2"	5/8"	1"	5-5/16"	DS9610314	304.09	298.81	DS9620314	390.61	388.16
1-1/4"	5/8"	3/4"	5-1/8"	DS9610307	262.05	255.49	DS9620307	317.65	312.81
2"	5/8"	1"	5-11/16"	DS9610320	514.27	512.75	DS9620320	605.63	601.26
2"	3/4"	1"	5-11/16"	DS9610321	514.27	512.75	DS9620321	605.63	601.26

10667

INTERNAL TOOL Solid Carbide Dovetail

Cutters

- Solid Micrograin Carbide
- Available uncoated or AlTiN
- Head Diameter +.000-.010



Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Overall Length (OAL)	Number of Teeth	Angle	Uncoated			AlTiN		
					Order No.	Price	SALE	Order No.	Price	SALE
1/8"	1/8"	2"	3	60 Degrees	GE97861095	74.33	68.31	GE97861095C	77.00	70.81
3/16"	3/16"	2-1/2"	3	60 Degrees	GE97861100	83.76	77.02	GE97861100C	87.35	80.34
1/4"	1/4"	2-1/2"	4	60 Degrees	GE97861105	89.18	81.98	GE97861105C	96.36	88.65
5/16"	0.312"	2-1/2"	4	60 Degrees	GE97861107	93.26	85.72	GE97861107C	106.68	98.10
3/8"	3/8"	2-1/2"	5	60 Degrees	GE97861110	95.97	88.21	GE97861110C	103.97	95.60
1/2"	1/2"	3"	6	60 Degrees	GE97861115	117.91	108.42	GE97861115C	132.20	121.54
5/8"	5/8"	3-1/2"	6	60 Degrees	GE97861117	153.64	141.27	GE97861117C	174.23	160.22
3/4"	3/4"	4"	6	60 Degrees	GE97861118	206.45	189.84	GE97861118C	224.40	197.50

10017

30137

CUTTING TOOLS

Heavy Duty Cobalt Screw Machine

Drills



Cobalt • 135° Split Point

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

Drill Bit Size / Cutting Diameter (DC)	Cutting Depth	Overall Length (OAL)	Order No.	Regular Price	SALE
1/16"	5/8"	1-5/8"	PT1840304	6.95	5.95
5/64"	11/16"	1-11/16"	PT1840305	6.98	5.95
3/32"	3/4"	1-3/4"	PT1840306	6.95	5.95
7/64"	13/16"	1-13/16"	PT1840307	7.89	6.95
1/8"	7/8"	1-7/8"	PT1840308	9.03	6.95
9/64"	15/16"	1-15/16"	PT1840309	9.14	6.95
5/32"	1"	2-1/16"	PT1840310	9.92	7.95
11/64"	1-1/16"	2-1/8"	PT1840311	11.23	7.95
13/64"	1-3/16"	2-1/4"	PT1840313	15.03	9.95
15/64"	1-5/16"	2-7/16"	PT1840315	18.36	11.95
1/4"	1-3/8"	2-1/2"	PT1840316	18.43	11.95
17/64"	1-7/16"	2-5/8"	PT1840317	21.66	13.95
5/16"	1-5/8"	2-13/16"	PT1840320	28.51	17.00
3/8"	1-13/16"	3-1/8"	PT1840324	39.42	23.00
13/32"	1-15/16"	3-5/16"	PT1840326	46.56	27.00
1/2"	2-1/4"	3-3/4"	PT1840332	63.26	35.00

24345

29 Pc. Taper Length Drill Set

Straight Shank • 1/16"-1/2" by 64ths

- High speed steel
- 118° Point
- Bright finish
- For applications requiring longer than jobber length



Order No.	Regular Price	SALE
AP50104E	264.11	175.00

24453

39 Pc. Tap & Die Sets

#4 thru 1/2"1" Adjustable Round Dies

- Self-hinged durable plastic case with removable tray
- Includes one each plug tap and 1" OD die for the following 17 thread sizes plus tools indicated
- **Thread sizes:** 4-40, 6-32, 8-32, 10-24, 10-32, 12-24, 1/4-20, 1/4-28, 5/16-18, 5/16-24, 3/8-16, 3/8-24, 7/16-14, 7/16-20, 1/2-13, 1/2-20, 1/8-27 NPT(pipe die is solid round)
- **Threading tools:** T-handle tap wrench, straight tap wrenches, die stock



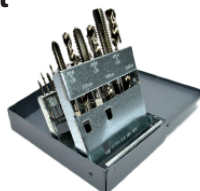
Cutting Edge Material	Order No.	Regular Price	SALE
Carbon Steel	ET51C614	163.17	86.10
HSS	ET51HS614	347.09	181.90

10278

Metric Tap and Drill Set

High Speed Steel with Metal Index

- All the popular taps and necessary drills plus metal index.
- **Set Includes:** M2.5x0.45, drill 2.05mm, M3x0.50, drill 2.50mm, M3.5x0.60, drill 2.90mm, M4x0.70, drill 3.30mm, M5x0.80, drill 4.20mm, M6x1.00, drill 5.00mm, M8x1.25, drill 6.70mm, M10x1.5, drill 8.50mm, M12x1.75, drill 10.20mm



FamilyName	Order No.	Regular Price	SALE
PCUET504099TDS-I ProCut	ET504099TDS	107.33	97.60

10350

Jobber Drills

High Speed Steel • 118° Standard Point • Surface Treated

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

Drill Bit Size / Cutting Diameter (DC)	Decimal Equivalent	Flute Length	Overall Length (OAL)	Order No.	Regular Price	SALE
1/64"	0.0156"	3/16"	3/4"	AC40001B	1.86	1.77
1/32"	0.0313"	1/2"	1-3/8"	AC40002B	1.19	0.43
3/64"	0.0469"	3/4"	1-3/4"	AC40003B	1.19	0.43
1/16"	0.0625"	7/8"	1-7/8"	AC40004B	1.19	0.43
5/64"	0.0781"	1"	2"	AC40005B	1.30	0.65
3/32"	0.0938"	1-1/4"	2-1/4"	AC40006B	1.30	0.65
7/64"	0.1094"	1-1/2"	2-5/8"	AC40007B	1.30	0.65
1/8"	0.125"	1-5/8"	2-3/4"	AC40008B	1.30	0.65
9/64"	0.1406"	1-3/4"	2-7/8"	AC40009B	2.24	1.95
5/32"	0.1563"	2"	3-1/8"	AC40010B	1.38	0.81
11/64"	0.1719"	2-1/8"	3-1/4"	AC40011B	1.47	0.99
3/16"	0.1875"	2-5/16"	3-1/2"	AC40012B	1.66	1.37
13/64"	0.2031"	2-7/16"	3-5/8"	AC40013B	1.86	1.77
7/32"	0.2188"	2-1/2"	3-3/4"	AC40014B	2.12	1.95
15/64"	0.2344"	2-5/8"	3-7/8"	AC40015B	2.12	1.95
1/4" E	0.25"	2-3/4"	4"	AC40016B	2.41	1.95
17/64"	0.2656"	2-7/8"	4-1/8"	AC40017B	2.89	2.75
9/32"	0.2813"	2-15/16"	4-1/4"	AC40018B	3.06	2.85
19/64"	0.2969"	3-1/16"	4-3/8"	AC40019B	3.52	3.15
5/16"	0.3125"	3-3/16"	4-1/2"	AC40020B	3.89	2.95
21/64"	0.3281"	3-5/16"	4-5/8"	AC40021B	4.17	2.95
11/32"	0.3438"	3-7/16"	4-3/4"	AC40022B	4.81	2.95
23/64"	0.3594"	3-1/2"	4-7/8"	AC40023B	5.28	4.25
3/8"	0.375"	3-5/8"	5"	AC40024B	5.47	4.35
25/64"	0.3906"	3-3/4"	5-1/8"	AC40025B	6.28	4.85
13/32"	0.4063"	3-7/8"	5-1/4"	AC40026B	6.38	4.85
27/64"	0.4219"	3-15/16"	5-3/8"	AC40027B	7.02	5.25
7/16"	0.4375"	4-1/16"	5-1/2"	AC40028B	7.32	5.45
29/64"	0.4531"	4-3/16"	5-5/8"	AC40029B	8.23	5.95
15/32"	0.4688"	4-5/16"	5-3/4"	AC40030B	8.71	6.25
31/64"	0.4844"	4-3/8"	5-7/8"	AC40031B	10.64	7.45
1/2"	0.5"	4-1/2"	6"	AC40032B	11.12	7.75
17/32"	0.5313"	4-13/16"	6-5/8"	AC40034B	18.34	12.05
9/16"	0.5625"	4-13/16"	6-5/8"	AC40036B	20.21	13.15
19/32"	0.5938"	5-3/16"	7-1/8"	AC40038B	20.76	13.55
5/8"	0.625"	5-3/16"	7-1/8"	AC40040B	23.70	15.30
21/32"	0.6563"	5-3/16"	7-1/8"	AC40042B	23.99	15.50
11/16"	0.6875"	5-5/8"	7-5/8"	AC40044B	27.42	17.60

24478

KEO 5 Pc. Combined Drills & Countersinks

Set #1 - #5

- 60° Plain type
- High speed steel



Order No.	Regular Price	SALE
AV4110000	82.40	81.20

22312

GEN2 T-A Standard T-A® Drill Inserts

Series Y

Blade Thickness - 3/32"



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

Cutting Diameter (DC)	TiAIN			TiN			AM200		
	Order No.	Price	SALE	Order No.	Reg-ular Price	SALE	Order No.	Reg-ular Price	SALE
3/8"	BA5215YA0012	54.92	48.96	BA5215YT0012	45.89	40.86	BA5245YH0012	68.08	60.68
0.386"	-	-	-	-	-	-	BA5245YH386	68.08	60.68
25/64"	BA5215YA390	54.92	48.96	BA5215YT390	45.89	40.86	BA5245YH390	68.08	60.68
13/32"	BA5215YA0013	54.92	48.96	BA5215YT0013	45.89	40.86	BA5245YH0013	68.08	60.68
27/64"	BA5215YA421	54.92	48.96	BA5215YT421	45.89	40.86	BA5245YH421	68.08	60.68
9.5 mm	BA5215YA95	54.92	48.96	BA5215YT95	45.89	40.86	BA5245YH95	68.08	60.68
0.386"	BA5215YA386	54.92	48.96	BA5215YT386	45.89	40.86	-	-	-
10 mm	BA5215YA10	54.92	48.96	BA5215YT10	45.89	40.86	BA5245YH10	68.08	60.68
10.2 mm	BA5215YA102	54.92	48.96	BA5215YT102	45.89	40.86	BA5245YH102	68.08	60.68
10.5 mm	BA5215YA105	54.92	48.96	BA5215YT105	45.89	40.86	BA5245YH105	68.08	60.68
10.8 mm	BA5215YA108	54.92	48.96	BA5215YT108	45.89	40.86	BA5245YH108	68.08	60.68
11 mm	BA5215YA11	54.92	48.96	BA5215YT11	45.89	40.86	BA5245YH11	68.08	60.68

9668



Standard T-A® Drill Inserts Series 0

Blade Thickness - 1/8"

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



Cutting Diameter (DC)	Super Cobalt, AM200			Super Cobalt, TiAIN			Super Cobalt, TiN		
	Order No.	Price	SALE	Order No.	Reg-ular Price	SALE	Order No.	Reg-ular Price	SALE
33/64"	BA52450H515	73.34	65.29	BA52150A515	59.05	52.57	BA52150T515	49.65	44.16
17/32"	BA52450H0017	73.34	65.29	BA52150A0017	59.05	52.57	BA52150T0017	49.65	44.16
35/64"	BA52450H546	73.34	65.29	BA52150A546	59.05	52.57	BA52150T546	49.65	44.16
9/16"	BA52450H0018	73.34	65.29	BA52150A0018	59.05	52.57	BA52150T0018	49.65	44.16
37/64"	BA52450H578	73.34	65.29	BA52150A578	59.05	52.57	BA52150T578	49.65	44.16
19/32"	BA52450H0019	73.34	65.29	BA52150A0019	59.05	52.57	BA52150T0019	49.65	44.16
39/64"	BA52450H609	73.34	65.29	BA52150A609	59.05	52.57	BA52150T609	49.65	44.16
5/8"	BA52450H0020	73.34	65.29	BA52150A0020	59.05	52.57	BA52150T0020	49.65	44.16
5/8"	-	-	-	-	-	-	BA52150T0020SP	68.82	61.38
41/64"	BA52450H640	73.34	65.29	BA52150A640	59.05	52.57	BA52150T640	49.65	44.16
21/32"	BA52450H0021	73.34	65.29	BA52150A0021	59.05	52.57	BA52150T0021	49.65	44.16
43/64"	BA52450H671	73.34	65.29	BA52150A671	59.05	52.57	BA52150T671	49.65	44.16
11/16"	BA52450H0022	73.34	65.29	BA52150A0022	59.05	52.57	BA52150T0022	49.65	44.16
13 mm	BA52450H13	73.34	65.29	BA52150A13	59.05	52.57	BA52150T13	49.65	44.16
13.5 mm	BA52450H135	73.34	65.29	BA52150A135	59.05	52.57	BA52150T135	49.65	44.16
14 mm	BA52450H14	73.34	65.29	BA52150A14	59.05	52.57	BA52150T14	49.65	44.16
14.5 mm	BA52450H145	73.34	65.29	BA52150A145	59.05	52.57	BA52150T145	49.65	44.16
15 mm	BA52450H15	73.34	65.29	BA52150A15	59.05	52.57	BA52150T15	49.65	44.16
15.5 mm	BA52450H155	73.34	65.29	BA52150A155	59.05	52.57	BA52150T155	49.65	44.16
16 mm	BA52450H16	73.34	65.29	BA52150A16	59.05	52.57	BA52150T16	49.65	44.16
16.5 mm	BA52450H165	73.34	65.29	BA52150A165	59.05	52.57	BA52150T165	49.65	44.16
17 mm	-	-	-	-	-	-	BA52150T17	49.65	44.16
17.5 mm	BA52450H175	73.34	65.29	BA52150A175	59.05	52.57	BA52150T175	49.65	44.16
17.5 mm	-	-	-	-	-	-	BA52150T175SP	68.82	61.38

9662

CUTTING TOOLS



Standard T-A® Drill

Inserts Series Z

Blade Thickness - 3/32"

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



Cutting Diameter (DC)	TiAlN			TiN			AM200		
	Order No.	Reg-ular Price	SALE	Order No.	Reg-ular Price	SALE	Order No.	Reg-ular Price	SALE
7/16"	BA5215ZA0014	54.92	48.96	BA5215ZT0014	45.89	40.86	BA-5245ZH0014	68.08	60.68
29/64"	BA5215ZA453	54.92	48.96	BA5215ZT453	45.89	40.86	BA5245ZH453	68.08	60.68
15/32"	BA5215ZA0015	54.92	48.96	BA5215ZT0015	45.89	40.86	BA-5245ZH0015	68.08	60.68
31/64"	BA5215ZA484	54.92	48.96	BA5215ZT484	45.89	40.86	BA5245ZH484	68.08	60.68
1/2"	BA5215ZA0016	54.92	48.96	BA5215ZT0016	45.89	40.86	BA-5245ZH0016	68.08	60.68
11.5 mm	BA5215ZA115	54.92	48.96	BA5215ZT115	45.89	40.86	BA5245ZH115	68.08	60.68
12 mm	BA5215ZA12	54.92	48.96	BA5215ZT12	45.89	40.86	BA5245ZH12	68.08	60.68
12.5 mm	BA5215ZA125	54.92	48.96	BA5215ZT125	45.89	40.86	BA5245ZH125	68.08	60.68

9669



Metric Straight Shank

Straight Flute Chucking Reamers

High Speed Steel



- Diameter tolerances: thru 12.50mm +.0002 -.000013.00 to 15.50mm +.0003 -.000016.00 to 25.00mm +.0001 +.0004
- Morse List #1655

Cutting Diameter (DC)	Length Chip Flute (LCF)	Overall Length (OAL)	HSS, Morse Cutting Tools			HSS, ProCut		
			Order No.	Reg-ular Price	SALE	Order No.	Reg-ular Price	SALE
1 mm	1/2"	2-1/2"	MT5222350	39.80	37.09	-	-	-
1.5 mm	1/2"	2-1/2"	MT5222351	39.80	37.09	-	-	-
2 mm	3/4"	3"	MT5222352	32.04	30.46	-	-	-
2.5 mm	7/8"	3-1/2"	MT5222353	32.47	30.87	-	-	-
3 mm	7/8"	3-1/2"	MT5222354	31.80	30.25	BD650300	12.78	9.95
3.5 mm	1"	4"	MT5222355	39.80	37.09	BD650350	18.44	14.33
4 mm	1"	4"	MT5222356	39.80	37.09	BD650400	18.44	14.33
4.5 mm	1-1/8"	4-1/2"	MT5222357	42.56	39.46	BD650450	18.44	14.33
5 mm	1-1/4"	5"	MT5222358	47.74	43.94	BD650500	22.50	17.38
5.5 mm	1-1/4"	5"	MT5222359	47.74	43.94	BD650550	22.50	17.38
6 mm	1-1/2"	6"	MT5222360	51.60	47.23	BD650600	22.50	17.38
6.5 mm	1-1/2"	6"	MT5222361	51.60	47.23	BD650650	22.50	17.38
7 mm	1-1/2"	6"	MT5222362	57.51	52.31	BD650700	25.29	19.47
7.5 mm	1-1/2"	6"	MT5222363	57.51	52.31	BD650750	25.29	19.47
8 mm	1-1/2"	6"	MT5222364	54.77	49.94	BD650800	25.29	19.47
8.5 mm	1-1/2"	6"	MT5222365	61.59	55.82	BD650850	28.25	21.69
9 mm	1-3/4"	7"	MT5222366	62.20	56.36	BD650900	28.25	21.69
9.5 mm	1-3/4"	7"	MT5222367	62.43	56.46	BD650950	28.25	21.69
10 mm	1-3/4"	7"	MT5222368	67.47	60.90	BD651000	29.56	22.67
10.5 mm	1-3/4"	7"	MT5222369	70.14	63.21	BD651050	30.66	23.50
11 mm	1-3/4"	7"	MT5222370	70.14	63.21	BD651100	32.52	24.89
11.5 mm	1-3/4"	7"	MT5222371	76.38	68.47	BD651150	35.75	27.32
12 mm	1-3/4"	7"	MT5222372	76.38	68.47	BD651200	35.75	27.32
12.5 mm	1-3/4"	7"	MT5222373	76.38	68.47	BD651250	35.75	27.32
13 mm	1-3/4"	7"	MT5222374	94.58	84.13	BD651300	35.75	27.32
13.5 mm	2"	8"	MT5222375	94.58	84.13	BD651350	39.82	30.37
14 mm	2"	8"	MT5222376	97.54	86.69	BD651400	39.82	30.37
14.5 mm	2"	8"	MT5222377	97.54	86.69	BD651450	39.82	30.37
15 mm	2"	8"	MT5222378	97.54	86.69	BD651500	45.40	34.55
15.5 mm	2"	8"	MT5222379	113.81	100.59	BD651550	45.40	34.55
16 mm	2-1/4"	9"	MT5222380	116.89	103.29	BD651600	45.40	34.55
16.5 mm	2-1/4"	9"	MT5222381	116.89	103.29	BD651650	51.97	39.48
17 mm	2-1/4"	9"	MT5222382	132.02	116.22	BD651700	51.97	39.48
17.5 mm	2-1/4"	9"	MT5222383	141.81	124.62	BD651750	51.97	39.48
18 mm	2-1/4"	9"	MT5222384	141.81	124.62	BD651800	59.91	45.44
18.5 mm	2-1/2"	9"	MT5222385	147.43	129.49	BD651850	59.91	45.44
19 mm	2-1/2"	9"	MT5222386	163.28	143.08	BD651900	63.44	48.08
19.5 mm	2-1/2"	9"	MT5222387	157.21	137.89	BD651950	63.44	48.08
20 mm	2-1/2"	9"	MT5222388	168.29	147.31	BD652000	67.13	50.85
20.5 mm	2-1/2"	9"	MT5222389	168.29	147.31	BD652050	67.13	50.85
21 mm	2-1/2"	9-1/2"	MT5222390	168.29	147.31	BD652100	76.11	57.59
21.5 mm	2-5/8"	10"	MT5222391	196.16	171.25	BD652150	76.11	57.59
22 mm	2-5/8"	10"	MT5222392	196.16	171.25	BD652200	76.50	57.88
22.5 mm	2-5/8"	10"	MT5222393	200.33	174.87	BD652250	76.50	57.88
23 mm	2-5/8"	10"	MT5222394	200.33	174.87	BD652300	82.79	62.60
23.5 mm	2-5/8"	10"	MT5222395	214.57	187.09	BD652350	82.79	62.60
24 mm	2-5/8"	10"	MT5222396	214.57	187.09	BD652400	82.79	62.60
24.5 mm	2-5/8"	10"	MT5222397	214.57	187.09	BD652450	90.57	68.43
25 mm	2-3/4"	10-1/2"	MT5222398	227.84	198.49	BD652500	90.57	68.43

10634

HSS M GF Taper Pipe Taps

High Speed Steel

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



Thread Diameter Size (TDZ)	Threads per Inch (TPI)	Flute Count (NOF)	Thread Cutting Part Length (THL)	Overall Length (OAL)	Morse Cutting Tools, NPT, Bright			Morse Cutting Tools, NPTF, Bright		
					Order No.	Reg-ular Price	SALE	Order No.	Reg-ular Price	SALE
1/16"	27	4	11/16"	2-1/8"	MT4036121	37.56	34.10	MT4036141	37.56	34.10
1/8"	27	4	3/4"	2-1/8"	MT4036122	37.37	33.90	MT4036142	37.37	33.90
1/4"	18	4	1-1/16"	2-7/16"	MT4036124	40.84	36.80	MT4036144	40.84	36.80
3/8"	18	4	1-1/16"	2-9/16"	MT4036125	53.61	47.40	MT4036145	53.61	47.40
1/2"	14	4	1-3/8"	3-1/8"	MT4036126	85.33	73.70	MT4036146	85.33	73.70
3/4"	14	5	1-3/8"	3-1/4"	MT4036127	120.75	103.00	MT4036147	120.75	103.00
1"	11.5	5	1-3/4"	3-3/4"	MT4036128	182.03	153.70	MT4036148	182.03	153.70
1-1/4"	11	5	1-3/4"	4"	MT4036129	257.75	216.40	MT4036149	257.75	216.40
1-1/2"	11.5	7	1-3/4"	4-1/4"	MT4036130	353.47	295.70	MT4036150	353.47	295.70
2"	11.5	7	1-3/4"	4-1/2"	MT4036131	474.99	396.30	MT4036151	474.99	396.30

†Small shank .3125 diameter

10007

RAPIDKUT™ Solid Carbide 6 Flute Countersink Sets

82° In plastic case

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



Quantity	Diameter Range	82 Degrees		
		Order No.	Regular Price	SALE
5	1/4" 3/8" 1/2" 3/4" 1"	BC55R22082	378.17	278.80

22332

BAHCO Portable Bandsaw Blades

Bi-Metal M-42 Wavy Tooth

- M42 material ensures longer life on all materials
- 44-7/8 Length
- Wavy tooth design provides smoother cutting and better harmonics
- 5-Pack sleeve provides better efficiencies, saves time, improves productivity (priced each sold in multiples of 5)



Width (W)	Thickness (H)	Teeth per Inch (TPI)	Order No.	Regular Price	SALE
1/2"	0.02"	10 W	FX848230319	15.10	8.70
1/2"	0.02"	14 W	FX848230326	15.10	8.75
1/2"	0.02"	18 W	FX848230333	15.10	8.70
1/2"	0.02"	10/14 VT	FX848230357	15.10	8.75
1/2"	0.02"	14/18 VT	FX848230364	15.10	8.75

2327

Starrett Unified Shank® Jig Saw Blades

- Starrett's exclusive and patented design Unified Shank® has literally changed the shape of one of the jig saw blades - now one shank fits both universal and Bosch shank jig saws
- Starrett's bi-metal unique high speed steel blade process makes them the most versatile and long lasting blades
- Sold in 5 packs



Metalcutting								
Length	Teeth per Inch (TPI)	Width (W)	Thickness (H)	Style	Set Type	Order No.	Regular Price	SALE
2"	24	3/16"	0.04"	Wavy	Scroll	FV6368729	20.45	17.25
2"	24	5/16"	0.04"	Wavy	Regular	FV6368728	17.62	14.15
2"	32	5/16"	0.04"	Wavy	Regular	FV6368731	21.15	17.99
4"	24	3/8"	0.04"	Wavy	Regular	FV6368730	25.59	20.05

Multi-Cutting								
Length	Teeth per Inch (TPI)	Width (W)	Thickness (H)	Style	Set Type	Order No.	Regular Price	SALE
2"	14	3/16"	0.04"	Wavy	Scroll	FV6368725	20.45	17.25
2"	14	5/16"	0.04"	Wavy	Regular	FV6368724	17.62	14.15
2"	18	5/16"	0.04"	Wavy	Regular	FV6368726	17.62	14.15
4"	10 14	3/8"	0.04"	Wavy	Varipitch	FV6368723	25.94	20.42
4"	18	3/8"	0.04"	Wavy	Regular	FV6368727	19.56	16.27

Woodworking								
Length	Teeth per Inch (TPI)	Width (W)	Thickness (H)	Style	Set Type	Order No.	Regular Price	SALE
3"	6	5/16"	0.05"	Ground	Alternative	FV6368718	21.62	18.50
3"	6	5/16"	0.05"	Ground	Tapered	FV6368717	33.47	29.26
3"	8	5/16"	0.05"	Regular	Alternative	FV6368720	19.01	15.73
3"	10	5/16"	0.05"	Ground	Tapered	FV6368721	22.66	16.63
3"	10	5/16"	0.05"	Ground	Tapered, Downstroke	FV6368722	22.66	16.63
4"	6	3/8"	0.05"	Skip	Alternative	FV6368719	27.09	21.81

2355

Starrett King Cut® Fire, Rescue & Demolition Blades

- Bi-metal Construction joins vacuum hardened high speed steel tooth edge to durable steel back provides exceptional strength and extended blade life
- Extra thick .063 x 1" wide blade for added durability



Length	Teeth per Inch (TPI)	Order No.	Regular Price	SALE
6"	10 14	FV6311454	36.76	33.39
6"	6 10	FV6311457	36.76	33.39
8"	10 14	FV6311463	53.82	53.11
8"	6 10	FV6311466	53.82	53.11
9"	10 14	FV6311472	55.21	54.77
9"	6 10	FV6311475	55.21	54.77
12"	10 14	FV6311481	73.70	70.96
12"	6 10	FV6311484	73.70	70.96

2350

Starrett 14 Pc. Carbide Tipped Maintenance Kit

Nine carbide tipped hole saws: 3/4, 7/8, 1-1/8, 1-3/8, 1-1/2, 1-3/4, 2, 2-1/4, 2-1/2", XA1, XA2 Arbors, XA014C Carbide tipped pilot bit, A15 12" Extension, A7 Ejector spring



Order No.	Regular Price	SALE
FZ7069971	558.83	425.08

2338

ABRASIVES

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

- Ceramic grain
- Fiberglass reinforced
- Durable and self-sharpening for fast, cool cutting and long wheel life
- Use on stainless steel, high tensile alloys and ferrous metals (iron, steel, welds, etc)



Diameter	Thickness	Arbor Hole	Maximum RPM	Specification	Order No.	Regular Price	SALE
2"	.060"	1/4"	30,550	#707	SP010200602160C	5.45	5.05
2"	.060"	3/8"	30,550	#707	SP010200603160C	5.45	5.05
3"	.060"	1/4"	25,000	#707	SP010300602160C	9.34	8.25
3"	.060"	3/8"	25,000	#707	SP010300603160C	9.34	8.25
4"	.060"	3/8"	25,000	#707	SP010400603160C	6.90	6.25

25174

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	2.52	1.90
1 1/2"	1/16"	1/4"	A60-RBF	45000	50	MG9035688	2.52	1.90
2"	1/32"	3/8"	A60-RBF	30000	50	MG9035689	2.52	1.90
2"	1/16"	1/4"	A36-TBF	30000	50	MG9045066	2.52	1.90
2"	1/16"	3/8"	A36-RBF	30000	50	MG9035690	2.52	1.90
2"	1/8"	3/8"	A24-RBF	30000	50	MG9035691	2.77	2.05
3"	1/32"	1/4"	A60-RBF	25000	50	MG9035500	2.52	2.04
3"	1/32"	3/8"	A60-RBF	25000	50	MG9035501	2.52	1.90
3"	1/16"	1/4"	A36-RBF	25000	50	MG9035502	2.56	1.91
3"	1/16"	1/4"	A60-RBF	25000	50	MG9045085	2.56	1.91
3"	1/16"	3/8"	A36-RBF	25000	50	MG9035503	2.56	1.91
3"	1/16"	3/8"	A60-RBF	25000	50	MG9045086	2.56	1.91
3"	1/8"	1/4"	A24-RBF	25000	50	MG9035504	2.87	2.12
3"	1/8"	3/8"	A24-RBF	25000	50	MG9035505	2.87	2.12
4"	1/32"	1/4"	A60-RBF	19100	50	MG9035506	3.26	2.46
4"	1/32"	3/8"	A60-RBF	19100	50	MG9035507	3.26	2.46
4"	1/16"	1/4"	A36-RBF	19100	50	MG9035508	3.54	2.61
4"	1/16"	1/4"	A60-RBF	19100	50	MG9045088	3.54	2.61
4"	1/16"	3/8"	A36-RBF	19100	50	MG9035509	3.54	2.61
4"	1/16"	3/8"	A60-RBF	19100	50	MG9045087	3.54	2.61
4"	1/16"	5/8"	A36-RBF	19100	50	MG9035510	3.54	2.61
4"	1/8"	1/4"	A24-RBF	19100	50	MG9035511	4.03	3.03
4"	1/8"	3/8"	A24-RBF	19100	50	MG9035512	4.03	3.03

Aluminum Oxide, Fast Cut								
Diameter	Thickness	Arbor Hole	Specification	Maximum RPM	Standard Pack	Order No.	Price	SALE
4"	1/32"	1/4"	A60-RBF	19100	50	MG9059106	1.50	1.17

236

CGW Zirconia Premium Small Cut-Off Wheels - Type 1

- ZA: Zirconia aluminum oxide - metal, steel and stainless
- Longer lasting life and easy cutting action



Diameter	Thickness	Arbor Hole	Specification	Maximum RPM	Order No.	Regular Price	SALE
3"	1/16"	1/4"	ZA36-TBF	23900	MG9036173	3.97	3.03
3"	1/16"	3/8"	ZA36-TBF	23900	MG9036174	3.97	3.03
3"	1/32"	1/4"	ZA60-TBF	23900	MG9036175	3.78	3.03
3"	1/32"	3/8"	ZA60-TBF	23900	MG9036176	3.78	3.03
4"	1/16"	3/8"	ZA36-TBF	19100	MG9036178	5.21	4.06
4"	1/32"	1/4"	ZA60-TBF	19100	MG9036179	3.89	3.37
4"	1/32"	3/8"	ZA60-TBF	19100	MG9036180	4.45	3.58

22877

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	3.20	2.95
3"	.035"	3/8"	25,465	TM0187458	3.16	2.95
3"	.060"	3/8"	25,465	TM0187459	3.62	3.35
4"	.035"	1/4"	19,100	TM0187460	3.43	3.20
4"	.035"	3/8"	19,100	TM0187461	3.43	3.20
4"	.060"	3/8"	19,100	TM0187462	4.03	3.75
4-1/2"	.040"	7/8"	13,300	TM0187464	4.36	4.05
4-1/2"	.045"	7/8"	13,300	TM0187465	4.36	4.05
4-1/2"	.045"	7/8"	13,300	TM0187466	4.36	4.05
5"	.045"	7/8"	12,250	TM0187467	4.60	4.25
5"	.045"	7/8"	12,250	TM0187468	4.62	4.30
6"	.045"	7/8"	10,200	TM0187469	7.21	6.70
6"	.045"	7/8"	10,200	TM0187470	7.99	7.45

147

SURF PRO Light Grind & Cut-Off Wheels - Aluminum Oxide - Type 1

- Aluminum oxide grain
- Fiberglass reinforced
- General purpose light grinding and cut-off applications
- Economical choice for cutting iron, steel, stainless steel and other materials



Diameter	Arbor Hole	Thickness	Grit	Order No.	Regular Price	SALE
2"	1/4"	1/8"	24	SP010201252124A	4.37	3.70
2"	1/4"	1/8"	36	SP010201252136A	4.41	3.75
2"	1/4"	1/8"	46	SP010201252146A	6.74	5.50
2"	3/8"	1/8"	24	SP010201253124A	4.37	3.70
2"	3/8"	1/8"	36	SP010201253136A	4.41	3.75
2"	3/8"	1/8"	46	SP010201253146A	4.19	3.60
3"	1/4"	1/8"	24	SP010301252124A	2.99	2.70
3"	1/4"	1/8"	36	SP010301252136A	2.99	2.70
3"	1/4"	1/8"	46	SP010301252146A	2.93	2.65
3"	3/8"	1/8"	24	SP010301253124A	3.46	3.05
3"	3/8"	1/8"	36	SP010301253136A	2.99	2.70
3"	3/8"	1/8"	46	SP010301253146A	3.98	3.40
4"	1/4"	1/8"	24	SP010401252124A	4.19	3.60
4"	1/4"	1/8"	36	SP010401252136A	4.18	3.60
4"	1/4"	1/8"	46	SP010401252146A	4.54	3.85
4"	3/8"	1/8"	24	SP010401253124A	4.18	3.60
4"	3/8"	1/8"	36	SP010401253136A	4.18	3.60
4"	3/8"	1/8"	46	SP010401253146A	4.54	3.85
4"	5/8"	1/8"	24	SP010401255124A	4.18	3.60
4"	5/8"	1/8"	36	SP010401255136A	4.18	3.60
4"	5/8"	1/8"	46	SP010401255146A	4.54	3.85

25162

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	4.57	3.90
2"	.060"	1/4"	60	SP010200602160Z	4.57	3.90
2"	.060"	3/8"	46	SP010200603146Z	4.57	3.90
2"	.060"	3/8"	60	SP010200603160Z	4.57	3.90
4"	.060"	3/8"	46	SP010400603146Z	6.97	5.65
4"	.060"	3/8"	60	SP010400603160Z	5.04	4.20
4"	1/16"	1/4"	46	SP010400622146Z	4.05	3.45
4"	1/16"	3/8"	46	SP010400623146Z	4.44	3.75

25176

NORTON 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	4.73	3.77	
3"	0.035"	3/8"	MH60030010628	4.73	3.77	
3"	1/16"	1/4"	MH60030010645	4.73	3.77	
3"	1/16"	3/8"	MH60030010647	4.66	3.72	
3"	1/16"	1/4"	MH60030010649	3.35	2.65	
4"	0.035"	1/4"	MH60040010629	6.50	5.11	
4"	0.035"	3/8"	MH60040010630	7.30	5.73	
4"	1/16"	1/4"	MH60040010654	6.41	5.04	
4"	1/16"	3/8"	MH60040010655	6.41	5.04	

Blue Fire						
Diameter	Thickness	Arbor Hole	Order No.	Regular Price	SALE	
3"	0.035"	3/8"	MH60030028629	22.11	17.16	
3"	0.035"	3/8"	MH60030043174	7.40	5.93	
3"	1/16"	3/8"	MH60030043175	7.49	6.04	
4"	1/16"	3/8"	MH60040043171	10.21	8.11	
4"	0.035"	3/8"	MH60040043173	10.21	8.11	

24139

UNITE ABRASIVES, INC. SAIT Back-Up Pads

- For use with Challenger II flexible grinding / blending wheels



Diameter	Arbor Hole	Maximum RPM	Order No.	Regular Price	SALE
4.5" and 5"	7/8"	13300/12200	MG4195245	49.23	42.27
7"	7/8"	8600	MG4195247	68.57	56.87

29636

Flat Head Wheel Arbors

- Left hand threaded arbor
- "Flat Head" style allows mounting between a single washer and the flat-head
- For mounting wire wheel brushes & other abrasive finishing products
- Rust proof finish



Arbor Hole	Max. Wheel Width	Shank Diameter	Overall Length	Order No.	Regular Price	SALE
1/2"	1/2"	1/4"	2 5/16"	MM54FHL30	11.50	10.50
1/2"	3/8"	1/4"	1 7/8"	MM54FHL25X	6.99	6.48
1/2"	7/8"	1/4"	2 5/16"	MM54FHL30X	7.45	7.40
1/4"	3/4"	3/16"	1 3/4"	MM54FHL8X	12.10	10.95
3/8"	3/8"	1/4"	1 5/8"	MM54FHL10X	6.90	6.30
5/8"	3/8"	1/4"	1 7/8"	MM54FHL50X	13.90	12.50

364

SURF PRO 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	10.08	8.60
1/4" or 3/8"	1/4"	2.15"	3/4"	SP24143814SH	11.59	9.80
3/8"	1/4"	2.15"	3/4"	SP24003814SH	10.08	8.60

Arbor Adapter, Nut Type						
Arbor Hole	Shank	Length	Washer OD	Order No.	Regular Price	SALE
1/4"	1/4"	2.50"	1"	SP24001414NT	9.53	8.15
3/8"	1/4"	2.50"	1"	SP24003814NT	9.53	8.15
1/2"	1/4"	2.50"	1 1/2"	SP24001214NT	10.36	9.45

696

SUPERIOR ABRASIVES Quick Change Disc Holders

- Roll-On (TR) features nylon screw type thread
- Turn-On (TS) features metal to metal quick change system



Diameter	Order No.	Regular Price	SALE
2"	MM5964198	19.00	16.70
2"	MM5964922	18.81	16.90
3"	MM5964949	23.83	21.30

25121

ABRASIVES

SURF PRO Aluminum Oxide Shop Rolls

- Ideal for cleaning and deburring metal surfaces
- Convenient packaging
- Flexible cloth backing
- Cut or tear to required length
- 50 Yard rolls



Grit	1"			1 1/2"			2"		
	Order No.	Price	SALE	Order No.	Price	SALE	Order No.	Regular Price	SALE
-	-	-	-	-	-	-	SP12SR20CRO	85.22	64.50
40	SP12SR10040A	24.96	23.00	SP12SR15040A	32.45	24.50	SP12SR20040A	46.79	35.50
50	SP12SR10050A	24.46	22.50	SP12SR15050A	35.00	24.50	SP12SR20050A	45.88	34.50
60	SP12SR10060A	23.68	21.80	SP12SR15060A	33.98	25.50	SP12SR20060A	44.51	33.50
80	SP12SR10080A	22.55	20.80	SP12SR15080A	32.37	24.50	SP12SR20080A	42.42	32.50
100	SP12SR10100A	21.94	20.20	SP12SR15100A	31.76	24.50	SP12SR20100A	41.11	31.50
120	SP12SR10120A	21.94	20.20	SP12SR15120A	31.76	24.50	SP12SR20120A	41.11	31.50
150	SP12SR10150A	21.98	20.30	SP12SR15150A	31.74	24.50	SP12SR20150A	41.11	31.50
180	SP12SR10180A	21.94	20.20	SP12SR15180A	31.74	24.50	SP12SR20180A	41.11	31.50
220	SP12SR10220A	21.98	20.30	SP12SR15220A	31.74	24.50	SP12SR20220A	41.11	31.50
240	SP12SR10240A	21.98	18.10	SP12SR15240A	31.74	25.90	SP12SR20240A	41.11	31.50
320	SP12SR10320A	21.98	16.50	SP12SR15320A	31.74	25.90	SP12SR20320A	41.11	31.50
400	SP12SR10400A	21.98	16.50	SP12SR15400A	31.70	24.50	SP12SR20400A	41.11	31.50

25149

3M Scotch-Brite™ Roloc™ Surface Conditioning Discs

- Scotch-Brite™ Roloc™ surface non-woven web provides a burr free decorative finish
- Removes grind marks, rust and coatings
- Roloc TR plastic button



Diameter	Maximum RPM	Grade	Color	Standard Pack	Order No.	Regular Price	SALE
1"	30000	Medium	Maroon	200	TM2115392	1.49	1.35
1"	30000	Very Fine	Teal	200	TM2115391	1.49	1.35
1 1/2"	30000	Coarse	Brown	50	TM2108764	1.55	1.40
1 1/2"	30000	Medium	Maroon	50	TM2108765	1.55	1.40
1 1/2"	30000	Very Fine	Teal	50	TM2108766	1.55	1.40
2"	25000	Coarse	Brown	50	TM2105528	2.26	2.05
2"	25000	Medium	Maroon	50	TM2105527	2.26	2.05
2"	25000	Very Fine	Teal	50	TM2105523	2.26	2.05
3"	18000	Coarse	Brown	25	TM2105532	4.19	3.80
3"	18000	Medium	Maroon	25	TM2105531	4.19	3.80
3"	18000	Very Fine	Teal	25	TM2105530	4.19	3.80
4"	12000	Coarse	Brown	4	TM2312954	6.07	5.55

Holder: MM59-64922

142

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**



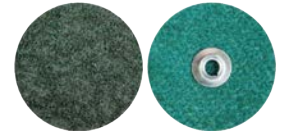
Diameter - 6"				
Grit	Order No.	Regular Price	SALE	
P80	TM1155560	127.21	118.76	
P120	TM1155562	117.42	109.79	
P320	TM1155567	117.42	109.79	

Diameter - 5"				
Grit	Order No.	Regular Price	SALE	
P150	TM1155543	83.15	78.31	
P120	TM1186490	83.15	78.31	
P180	TM1186492	83.15	78.31	
P320	TM1186495	83.15	78.31	

149

NORTON RapidPrep XHD Abrasive Discs

- Achieve proven labor and consumable savings by reducing blending application steps vs. coated flap discs
- Improve cut control and surface blending over traditional coated flap discs and fiber discs
- Gain product life and shape integrity vs. competing product

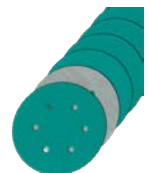


Diameter	Attachment Type	Grade	Maximum RPM	Order No.	Price	SALE
4 1/2"	5/8"-11	Coarse	12,000	MH6170060	19.56	15.52
5"	5/8"-11	Coarse	10,000	MH6170061	23.00	18.18
4 1/2"	5/8"-11	Medium	12,000	MH6170062	19.56	15.52
5"	5/8"-11	Medium	10,000	MH6170063	23.94	18.90
4 1/2"	No Hole	Coarse	12,000	MH6170179	16.53	13.09
5"	No Hole	Coarse	10,000	MH6170181	20.29	16.04
7"	No Hole	Coarse	8,500	MH6170182	37.77	29.78
4 1/2"	No Hole	Medium	12,000	MH6170183	16.32	12.95
5"	No Hole	Medium	10,000	MH6170185	19.83	15.73
7"	No Hole	Medium	8,500	MH6170186	34.78	27.46
2"	TR Type III	Coarse	18,000	MH6170271	6.95	5.64
3"	TR Type III	Coarse	18,000	MH6170273	13.58	10.80
4"	TR Type III	Coarse	12,000	MH6170274	15.93	12.66
4 1/2"	7/8"	Coarse	12,000	MH6170275	15.81	12.53
5"	7/8"	Coarse	10,000	MH6170279	20.58	16.23
7"	7/8"	Coarse	8,500	MH6170280	35.41	27.78
4 1/2"	7/8"	Medium	12,000	MH6170282	15.81	12.53
5"	7/8"	Medium	10,000	MH6170283	20.58	16.23
7"	7/8"	Medium	8,500	MH6170284	34.96	27.38
2"	TR Type III	Medium	20,000	MH6170285	6.95	5.64
3"	TR Type III	Medium	18,000	MH6170286	13.58	10.80
4"	TR Type III	Medium	12,000	MH6170287	15.93	12.66
7"	5/8"-11	Coarse	8,500	MH6170288	38.40	30.30
7"	5/8"-11	Medium	8,500	MH6170289	38.40	30.30

29736

CGW Q711T Hook & Loop Aluminum Oxide Discs

- Velcro
- Film backing - Strong, yet pliable .003 Mylar backing
- Film offers up to 4X the life vs. paper discs
- Longest lasting disc available by up to 300% over paper discs
- Uniform film backing with "P" graded abrasive for uniform finish
- Faster rate of cut, more consistent finish and longer life
- Sold in packs of 100



		No Hole			8		
Diameter	Grit	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
5"	80	MG9451231	1.11	0.93	MG9451303	1.11	0.93
5"	100	MG9451232	1.09	0.92	MG9451304	1.09	0.92
5"	120	MG9451233	1.05	0.87	MG9451305	1.05	0.87
5"	150	MG9451234	1.05	0.87	MG9451306	1.05	0.87
5"	180	MG9451235	1.05	0.87	MG9451307	1.05	0.87
5"	220	MG9451236	1.05	0.87	MG9451308	1.05	0.87
5"	320	MG9451239	1.05	0.87	-	-	-

260

SURF PRO 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



Diameter	40				60				80				100				120				36			
	Order No.	Reg-ular Price	SALE		Order No.	Reg-ular Price	SALE		Order No.	Reg-ular Price	SALE		Order No.	Reg-ular Price	SALE		Order No.	Reg-ular Price	SALE		Order No.	Reg-ular Price	SALE	
2"	SP11PSAD02040A	0.35	0.30		SP11PSAD02060A	0.36	0.30		SP11PSAD02080A	0.64	0.55		SP11PSAD02100A	0.25	0.20		SP11PSAD02120A	0.24	0.20		-	-	-	
3"	SP11PSAD03040A	0.63	0.44		SP11PSAD03060A	0.63	0.44		SP11PSAD03080A	0.56	0.39		SP11PSAD03100A	0.50	0.45		SP11PSAD03120A	0.50	0.45		-	-	-	
5"	SP11PSAD05040A	1.80	1.50		SP11PSAD05060A	1.51	1.17		SP11PSAD05080A	1.45	1.10		SP11PSAD05100A	1.37	1.04		SP11PSAD05120A	1.37	1.04		SP11PSAD05036A	1.97	1.69	
6"	SP11PSAD06040A	2.49	2.23		SP11PSAD06060A	2.18	1.91		SP11PSAD06080A	2.04	1.73		SP11PSAD06100A	1.45	1.10		SP11PSAD06120A	1.84	1.43		SP11PSAD06036A	2.85	2.65	
8"	SP11PSAD08040A	3.06	2.90		SP11PSAD08060A	3.83	3.60		SP11PSAD08080A	3.52	3.40		SP11PSAD08100A	2.64	2.60		SP11PSAD08120A	2.64	2.60		SP11PSAD08036A	5.13	4.60	
9"	SP11PSAD09040A	5.39	4.80		SP11PSAD09060A	5.44	4.90		SP11PSAD09080A	4.68	4.20		SP11PSAD09100A	4.90	4.40		SP11PSAD09120A	4.90	4.40		SP11PSAD09036A	5.63	5.00	
10"	SP11PSAD10040A	6.58	5.80		SP11PSAD10060A	7.08	6.20		SP11PSAD10080A	7.10	5.35		SP11PSAD10100A	5.56	4.90		SP11PSAD10120A	5.82	5.20		SP11PSAD10036A	6.86	6.00	
12"	SP11PSAD12040A	8.80	8.40		SP11PSAD12060A	8.03	6.60		SP11PSAD12080A	8.07	7.00		SP11PSAD12100A	7.56	6.50		SP11PSAD12120A	7.56	6.50		SP11PSAD12036A	11.64	9.30	
15"	SP11PSAD15040A	14.75	12.30		SP11PSAD15060A	12.96	10.90		SP11PSAD15080A	12.82	10.80		SP11PSAD15100A	12.44	10.50		-	-	-	SP11PSAD15036A	15.30	12.70		
16"	SP11PSAD16040A	13.74	11.50		SP11PSAD16060A	12.22	10.30		SP11PSAD16080A	11.51	9.70		SP11PSAD16100A	10.32	8.80		SP11PSAD16120A	10.85	9.20		SP11PSAD16036A	17.97	14.60	
20"	SP11PSAD20040A	22.00	17.30		SP11PSAD20060A	21.13	16.70		SP11PSAD20080A	19.82	15.90		SP11PSAD20100A	14.78	12.30		SP11PSAD20120A	14.78	12.30		SP11PSAD20036A	29.33	23.00	
24"	SP11PSAD24040A	36.57	29.80		SP11PSAD24060A	35.48	28.90		SP11PSAD24080A	33.53	27.30		SP11PSAD24100A	31.01	25.30		SP11PSAD24120A	31.01	25.30		SP11PSAD24036A	41.83	34.00	

25147

SURF PRO Aluminum Oxide Grain Quick Change Abrasive Discs

Aluminum oxide grain quick change discs

- Best used for general purpose deburring and blending on ferrous and nonferrous metals
- Ideal for use on mild contours or flat surfaces
- Blends light welds, machine marks & parting lines
- Sold in box quantity (100 pcs.)



SUPERIOR ABRASIVES Rigid Kut® Ceramic Quick Change Discs

- Our most firm disc, as stiff as a fiber disc with better grain retention
- Grind high temp alloys such as cobalt chrome, hastalloy and inconel
- Extended life over all other quick change discs with tremendous edge wear



1 1/2" Aluminum Oxide						
Roll-On				Turn-On		
Grit	Order No.	Price	SALE	Order No.	Regular Price	SALE
24	SP11QCR15024A	0.91	0.74	-	-	-
40	SP11QCR15040A	0.91	0.74	SP11QCT15040A	0.95	0.75
50	SP11QCR15050A	0.91	0.74	SP11QCT15050A	0.82	0.65
60	SP11QCR15060A	0.91	0.74	-	-	-
80	SP11QCR15080A	0.91	0.74	SP11QCT15080A	0.82	0.65
100	SP11QCR15100A	0.56	0.37	-	-	-
120	SP11QCR15120A	0.91	0.74	-	-	-

2" Aluminum Oxide						
Roll-On				Turn-On		
Grit	Order No.	Price	SALE	Order No.	Regular Price	SALE
24	SP11QCR20024A	1.02	0.74	SP11QCT20024A	1.17	0.90
36	SP11QCR20036A	1.02	0.74	SP11QCT20036A	0.98	0.82
40	SP11QCR20040A	0.95	0.80	SP11QCT20040A	0.91	0.74
50	SP11QCR20050A	0.91	0.74	SP11QCT20050A	0.84	0.75
60	SP11QCR20060A	0.84	0.75	SP11QCT20060A	1.13	0.90
80	SP11QCR20080A	0.88	0.71	SP11QCT20080A	0.82	0.71
100	SP11QCR20100A	0.78	0.71	SP11QCT20100A	0.78	0.65
120	SP11QCR20120A	0.88	0.71	SP11QCT20120A	0.88	0.71

1-1/2 Holders: Roll-On - MM59-61174 Turn-On - MM59-641462 Holders: 22043
Roll-On - MM59-64922 Turn-On - MM59-64198

Diameter - 2"						
Type S				Type R		
Grit	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
36	MM6447801	1.97	1.51	MM6447813	1.97	1.51
50	MM6447802	1.89	1.45	MM6447814	1.89	1.45
60	MM6447803	1.57	1.36	MM6447815	1.57	1.36
80	MM6447804	1.46	1.15	MM6447816	1.46	1.15
120	MM6447806	1.38	1.15	MM6447818	1.38	1.15

Diameter - 3"						
Type S				Type R		
Grit	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
36	MM6447807	2.39	2.05	MM6447819	2.39	2.05
50	MM6447808	2.40	1.91	MM6447820	2.40	1.91
60	MM6447809	2.25	1.80	MM6447821	2.25	1.80
80	MM6447810	2.17	1.75	MM6447822	2.17	1.75
120	MM6447812	2.05	1.65	MM6447824	2.05	1.65

Standard package - 2"=100 pack / 3"=50/pack2 Holder: Roll-On - MM59-64922 Turn-On - MM59-641983 Holder: Roll-On - MM59-64949 Turn-On - MM59-64113 629

ABRASIVES

SURF PRO CGT-100% SG

Ceramic Resin Fiber Discs

- **Applicable Material:** Stainless Steel, Titanium & Super Alloys, Mild Carbon Steel, Cold Rolled Steel



Diameter	Arbor Hole	Grit	Order No.	Price	SALE
4 1/2"	7/8"	16	SP11RF457016CGT	3.23	3.20
4 1/2"	7/8"	24	SP11RF457024CGT	2.93	2.90
4 1/2"	7/8"	36	SP11RF457036CGT	2.84	2.85
4 1/2"	7/8"	50	SP11RF457050CGT	2.35	2.25
4 1/2"	7/8"	60	SP11RF457060CGT	2.05	1.90
4 1/2"	7/8"	80	SP11RF457080CGT	1.89	1.73
4 1/2"	7/8"	100	SP11RF457100CGT	1.73	1.51
4 1/2"	7/8"	120	SP11RF457120CGT	1.47	1.24
5"	7/8"	16	SP11RF057016CGT	3.91	3.75
5"	7/8"	24	SP11RF057024CGT	3.81	3.65
5"	7/8"	36	SP11RF057036CGT	3.81	3.55
5"	7/8"	50	SP11RF057050CGT	3.10	3.05
5"	7/8"	60	SP11RF057060CGT	2.65	2.60
5"	7/8"	80	SP11RF057080CGT	2.44	2.35
5"	7/8"	100	SP11RF057100CGT	2.25	2.15
5"	7/8"	120	SP11RF057120CGT	1.89	1.73
7"	7/8"	16	SP11RF077016CGT	7.97	7.10
7"	7/8"	24	SP11RF077024CGT	7.30	6.55
7"	7/8"	36	SP11RF077036CGT	6.46	5.85
7"	7/8"	50	SP11RF077050CGT	5.74	5.25
7"	7/8"	60	SP11RF077060CGT	4.94	4.60
7"	7/8"	80	SP11RF077080CGT	4.53	4.25
7"	7/8"	100	SP11RF077100CGT	4.13	3.95
7"	7/8"	120	SP11RF077120CGT	3.40	3.30

28713

VSM Ceramic Resin Fibre Discs-XF870

VSM XF870 ceramic material has an extremely high stock removal rate thanks to constant recreation of sharp grain points. Cool grinding and extension of service lives with VSM TOP SIZE additional grinding-active layer. High wear resistance. Form-resistant vulcanized fibre backing.

- Ceramic grain abrasive with a medium coat and self-sharpening effect for medium contact pressures
- impressive results on stainless steels or superalloys with aggressive cut and a very long lifetime
- additional TOP SIZE layer improves stock removal while reducing the temperature in the grinding zone.
- For Use on Unalloyed Steels, Stainless Steels, Super Alloys, Non-Ferrous and Aluminum
- Best for use on carbon steel, stainless steel, cast iron, and ductile iron.



Diameter	Arbor Hole	Grit	Order No.	Price	SALE
4-1/2"	7/8"	24	VS10149133	5.83	4.46
4-1/2"	7/8"	36	VS10149134	5.67	4.33
4-1/2"	7/8"	50	VS10149135	5.12	3.92
4-1/2"	7/8"	60	VS10149136	4.90	3.75
4-1/2"	7/8"	100	VS10149131	4.17	3.46
4-1/2"	7/8"	120	VS10149132	6.78	4.90
7"	7/8"	24	VS10149148	7.93	6.25
7"	7/8"	36	VS10149149	7.71	5.79
7"	7/8"	50	VS10149151	7.21	5.54
7"	7/8"	60	VS10149152	6.87	5.37
7"	7/8"	100	VS10149146	6.50	4.95
7"	7/8"	120	VS10149147	6.50	4.95

30834



Belts for Portable Sanders

Blaze Belts

- Lasts 50% to 200% longer on mild and carbon steel, stainless, cobalt, chrome, inconel, and titanium
- Cuts cooler and 30% faster than current generation belts
- Lowers total grinding cost

New Improved Y-Weight Polyester Cloth Back

- Better grain adhesion - edge fray resistance
- More consistent grind throughout extended belt life



Width	Length	Grit	Standard Pack	Order No.	Regular Price	SALE
1/2"	12"	40	200	MH61B0098018	5.28	4.20
1/2"	12"	60	200	MH61B0098019	5.06	4.06
1/2"	12"	80	200	MH61B0098020	4.86	3.87
1/2"	18"	40	200	MH61B0098021	5.62	4.49
1/2"	18"	60	200	MH61B0098022	5.35	4.26
1/2"	18"	80	200	MH61B0098023	5.13	4.10
1/2"	24"	40	200	MH61B0098024	6.19	4.89
1/2"	24"	60	200	MH61B0098025	5.76	4.61
1/2"	24"	80	200	MH61B0098026	5.35	4.26
3/4"	18"	40	200	MH61B0098027	6.29	4.88
3/4"	18"	60	200	MH61B0098028	5.88	4.70
3/4"	18"	80	200	MH61B0098029	5.52	4.40
3/4"	20-1/2"	40	200	MH61B0098030	6.44	4.87
3/4"	20-1/2"	60	200	MH61B0098031	6.19	4.89
3/4"	20-1/2"	80	200	MH61B0098032	5.81	4.65

10727



Velcro Backed Resin Paper Abrasive Discs

- Aluminum oxide resin free cut treated for metal, wood and plastic
- Easy press-on/peel-off - saves time
- Hook and loop backing adds strength, reducing tearing and run cooler for longer life
- Holding power not affected by dirt, dust, heat, humidity
- We also offer the vacuum hole paper disc and conversion hardware for the clean air vacuum sanders



Order No.	Regular Price	SALE
SP11VBD500400AE	2.25	1.90
SP11VBD500600AE	2.13	2.15
SP11VBD500800AC	1.42	1.24
SP11VBD500800AE	1.53	1.41
SP11VBD500808AC	1.59	1.48
SP11VBD501000AC	1.10	0.85
SP11VBD501008AC	1.54	1.43
SP11VBD501200AC	1.38	1.21
SP11VBD501208AC	1.37	1.19
SP11VBD501500AC	1.37	1.19
SP11VBD501508AC	1.37	1.19
SP11VBD501800AC	1.10	0.85
SP11VBD501808AC	1.37	1.19
SP11VBD502200AC	1.21	0.97
SP11VBD502208AC	1.54	1.05
SP11VBD502400AC	1.10	0.85
SP11VBD502408AC	1.10	0.85
SP11VBD502800AC	1.10	0.85
SP11VBD502808AC	1.10	0.85
SP11VBD503200AC	1.37	1.19
SP11VBD503208AC	1.10	0.85
SP11VBD504000AC	1.10	0.85
SP11VBD504008AC	1.10	0.85
SP11VBD600400AE	2.48	2.40
SP11VBD600600AE	2.59	2.50
SP11VBD600800AC	1.62	1.49
SP11VBD600800AE	2.13	2.15
SP11VBD600808AC	1.62	1.49
SP11VBD601000AC	1.69	1.58
SP11VBD601008AC	1.34	1.13
SP11VBD601200AC	1.34	1.13
SP11VBD601208AC	1.23	1.01
SP11VBD601500AC	1.46	1.27
SP11VBD601508AC	1.69	1.58
SP11VBD601800AC	1.34	1.13
SP11VBD601808AC	1.34	1.13
SP11VBD602200AC	1.34	1.13
SP11VBD602208AC	1.69	1.58
SP11VBD602400AC	1.34	1.13
SP11VBD602408AC	1.34	1.13
SP11VBD602800AC	1.34	1.13
SP11VBD602808AC	3.77	3.40
SP11VBD603200AC	1.34	1.13
SP11VBD603208AC	1.34	1.13
SP11VBD604000AC	1.34	1.13
SP11VBD604008AC	1.34	1.13

25182



Depressed Center Wheels

Carbo Metal general purpose aluminum oxide wheels

- Aluminum oxide abrasive for general purpose applications
- Economical choice for initial price conscious customers
- Low initial cost per wheel
- Good choice for on-site and small unit jobs

Carbo Gold quality aluminum oxide wheels for cost effective grinding

- Aluminum oxide abrasive and an advanced resin bond
- Fast stock removal
- No burning or vibration
- Great choice for grinding all types of ferrous metals

Gold Maxx for free cutting, premium performance

- Zirconia abrasive blend with a free cutting bond that makes grinding easier
- High performance level; low price
- 30% Longer life than standard aluminum oxide wheels
- Performs well on all ferrous metals from carbon steel to stainless

Premier Red for highest performance and productivity

- Highest productivity; lowest total grinding costs
- Lasts three times as long as aluminum oxide wheels
- Outstanding results grinding stainless and high alloy steels



Diameter	Width	Arbor Hole	Maximum RPM	Carbo Gold A24 Grit			Premier Red Z24 Grit			Carbo Gold Maxx ZA24R		
				Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
4"	1/4"	3/8"	13,500	-	-	-	MG4602867	11.18	8.25	-	-	-
4"	1/4"	5/8"	13,500	-	-	-	MG4602868	11.18	8.25	-	-	-
4 1/2"	1/8"	7/8"	13,300	MG4602838	4.54	3.36	MG4602870	10.21	7.50	-	-	-
4 1/2"	1/4"	5/8"-11	13,300	-	-	-	MG4602873	14.39	10.60	-	-	-
4 1/2"	1/4"	7/8"	13,300	-	-	-	MG4602872	11.18	8.25	-	-	-
5"	1/4"	7/8"	12,200	MG4602846	6.45	4.75	-	-	-	MG4670193	10.75	7.95
6"	1/4"	7/8"	10,200	MG4602849	8.25	6.10	-	-	-	-	-	-
7"	1/4"	5/8"-11	8,500	-	-	-	-	-	-	MG4670195	21.43	15.80
7"	1/4"	7/8"	8,500	MG4602853	9.63	7.10	MG4602881	19.05	14.00	-	-	-
9"	1/8"	5/8"-11	6,600	-	-	-	-	-	-	-	-	-
9"	1/4"	5/8"-11	6,600	-	-	-	MG4602889	36.74	27.00	MG4670197	28.03	20.60
9"	1/4"	7/8"	6,600	-	-	-	-	-	-	MG4670196	23.49	17.30

22904

3M 6" x 9" Hand Pads

- Excellent products for hand finishing and cleaning of woods, metals and composites
- Ideal for wood finishing, paint prep and general cleaning
- Priced each / sold in standard pack of 20 only
- Save up to 10% on case qty. (60 pieces)



Color	Grade	Order No.	Regular Price	SALE
Light Gray	Ultra Fine	TM2204028	3.48	2.78
Maroon	Very Fine	TM2204029	2.32	2.10
Tan	Medium	TM2218451	227.30	211.35
Tan	Coarse	TM2265055	6.24	5.47
Gray	Medium	TM2265056	4.21	3.85

22601



Flexible Diamond Hand Pads

- Lightweight and durable conformable backing 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	43.64	34.44
2 1/8"	3 1/2"	60	Green	MH63HP06360	82.84	63.17
2 1/8"	3 1/2"	120	Black	MH63HP06361	67.63	54.56
2 1/8"	3 1/2"	200	Red	MH63HP06362	55.34	44.63
2 1/8"	3 1/2"	800	White	MH63HP06363	43.64	34.44
2 1/8"	3 1/2"	1800	Blue	MH63HP06364	43.64	34.44

24138



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



Width	Length	Grit	Aluminum Oxide			Zirconia Alumina		
			Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
6"	48"	36	MH61B0422095	12.73	10.14	MH61B0627698	34.00	26.30
6"	48"	40	MH61B0120900	5.42	4.38	MH61B0627697	34.60	27.25
6"	48"	40	MH61B0622585	39.21	31.40	MH61B0628937	30.63	24.18
6"	48"	60	MH61B0622575	30.07	23.78	MH61B0628931	27.01	21.34
2"	48"	80	MH61B0622570	23.43	18.48	MH61B0227099	9.12	7.15
2"	48"	120	MH61B0622560	22.68	17.97	MH61B0228615	9.52	7.63

24108

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	1.07	0.79
80	SP12S911080S	1.02	0.74
120	SP12S91120S	0.99	0.73
150	SP12S91150S	0.80	0.65
180	SP12S91180S	0.74	0.58
220	SP12S911220S	0.74	0.58
240	SP12S911240S	0.64	0.46
280	SP12S911280S	0.74	0.58
320	SP12S911320S	0.70	0.55
360	SP12S911360S	0.70	0.55
400	SP12S911400S	0.70	0.55
500	SP12S911500S	0.70	0.55
600	SP12S911600S	0.70	0.55
1000	SP12S9111000S	0.74	0.58

10739

ABRASIVES

SURF PRO Flap Discs

Zirconia Alumina with Poly-Cotton Back

- Poly-cotton heat treated backing for added flexibility
- Resin bond offers maximum cutting capacity, strong edge stability and long life
- Active grinding agent provides cool cutting with light pressure
- Recommended for aggressive use and heavy duty applications
- Excellent on carbon and stainless steel

Zirconium Alumina Plus

- Excellent on carbon and stainless steels
- Provides fast stock removal and excellent life

Ceramic Grain

- Best choice for grinding stainless steel, titanium, inconel, and other hard metals
- Self-sharpening grain creates a "cool grinding surface" for longer disc life and reduced production cost
- 13300 Max. RPM

T-27 APPLICATIONS: Use when working on flat grinding surface **T-29 APPLICATIONS:** Angled for contour and edge work



Diameter	Arbor Hole	Grit	Ceramic, Type 27			Zirconia Premium, Type 27			Zirconia, Type 27			Zirconia Premium, Type 29			Zirconia, Type 29		
			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 1/2"	7/8"	36	SP11FD45A27036C	15.18	13.10	SP11FD45A27036P	7.49	6.50	SP11FD45A27036Z	6.58	4.90	SP11FD45A29036P	7.49	6.50	SP11FD45A29036Z	5.45	4.90
4 1/2"	7/8"	40	SP11FD45A27040C	14.08	12.20	SP11FD45A27040P	7.75	6.70	SP11FD45A27040Z	5.24	4.70	SP11FD45A29040P	7.21	6.30	SP11FD45A29040Z	7.57	6.60
4 1/2"	7/8"	60	SP11FD45A27060C	13.63	10.40	SP11FD45A27060P	12.40	10.20	SP11FD45A27060Z	5.13	4.60	SP11FD45A29060P	7.25	6.30	SP11FD45A29060Z	6.19	5.20
4 1/2"	7/8"	80	SP11FD45A27080C	11.06	9.65	SP11FD45A27080P	6.93	6.00	SP11FD45A27080Z	5.13	4.60	SP11FD45A29080P	6.93	6.00	SP11FD45A29080Z	4.76	4.30
4 1/2"	7/8"	120	-	-	-	SP11FD45A27120P	7.36	6.40	-	-	-	SP11FD45A29120P	6.83	6.00	-	-	-
4 1/2"	5/8"-11	36	SP11FD45H27036C	15.69	13.50	-	-	-	SP11FD45H27036Z	13.05	10.60	SP11FD45H29036P	12.01	10.10	SP11FD45H29036Z	8.20	7.10
4 1/2"	5/8"-11	40	SP11FD45H27040C	15.69	13.50	SP11FD45H27040P	10.04	8.50	SP11FD45H27040Z	7.40	6.40	SP11FD45H29040P	10.04	8.50	SP11FD45H29040Z	7.40	6.40
4 1/2"	5/8"-11	60	SP11FD45H27060C	14.71	12.70	SP11FD45H27060P	9.74	8.30	SP11FD45H27060Z	13.05	10.20	SP11FD45H29060P	9.74	8.30	SP11FD45H29060Z	7.81	6.70
4 1/2"	5/8"-11	80	SP11FD45H27080C	13.69	11.80	-	-	-	SP11FD45H27080Z	7.81	6.70	SP11FD45H29080P	9.78	8.30	SP11FD45H29080Z	9.45	7.30
4 1/2"	5/8"-11	120	-	-	-	SP11FD45H27120P	10.17	8.60	-	-	-	SP11FD45H29120P	10.17	8.60	-	-	-

25159

CGW Z3 Ultimate Blue Zirconia Flap Discs

Z3 Ultimate - Excellent on steel and stainless

- Extra wide material width for extra long life - This creates extra spacing to allow zirconia to break down
- Special design flap structure provides cushion-like impact, thus making stock removal easier to control and offering best finishing results
- 30% longer life than regular density flap discs
- Premium 100% Zirconia Alumina grain with a poly/cotton heat treated backing



Diameter	Arbor Hole	Maximum RPM	Grit	Type 27			Type 29		
				Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
4-1/2"	7/8"	13,300	36	MG9054001	10.02	8.10	MG9054021	10.02	8.10
4-1/2"	7/8"	13,300	40	MG9054002	10.02	8.10	MG9054022	10.02	8.10
4-1/2"	7/8"	13,300	60	MG9054004	10.02	8.10	MG9054024	10.02	8.10
4-1/2"	7/8"	13,300	80	MG9054005	10.02	8.10	MG9054025	10.02	8.10
4-1/2"	5/8"-11	13,300	36	MG9054011	12.76	10.31	MG9054031	12.76	10.31
4-1/2"	5/8"-11	13,300	40	MG9054012	12.76	10.31	MG9054032	12.76	10.31
4-1/2"	5/8"-11	13,300	60	MG9054014	12.76	10.31	MG9054034	12.76	10.31
4-1/2"	5/8"-11	13,300	80	MG9054015	12.76	10.31	MG9054035	12.76	10.31

255

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	28.10	21.94
4 1/2"	7/8"	13,580	MH60D045070794	23.99	18.82
5"	5/8"-11	12,225	MH60D050070795	31.45	24.52
5"	7/8"	12,225	MH60D050070796	28.10	21.94
6"	5/8"-11	10,185	MH60D060070797	38.83	30.30
6"	7/8"	10,185	MH60D060070798	34.17	26.70
7"	5/8"-11	8,600	MH60D070070799	40.79	31.84
7"	7/8"	8,600	MH60D070070800	35.82	27.92

478

CGW Aluminum Oxide Rol-On Surface Grinding Discs - Maroon

- Non-woven material for bleeding scratches and discoloration removal (stainless sheet burn)



Diameter	Maximum RPM	Order No.	Regular Price	SALE
2"	25,000	MG9053251	2.87	2.32
3"	25,000	MG9053252	4.88	3.94

222

STRAUSS & CO. INDUSTRIAL DIAMONDS LTD. NF - Diamond Needle Files

Round Handle

- NF - Needle Files are our most popular files
- Used on hard materials such as: Tungsten Carbide, steels of 40Hrc and harder, ceramic materials, glass, etc.
- Shank has a round shaft of 3mm

Shape	Size	Diamond Length	Overall Length	Coarse			Fine			Medium		
				Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
Three Square	3.1 mm	2 3/4"	5 1/2"	MN51C2132	50.17	42.88	MN51F2132	50.17	42.88	MN51M2132	50.17	42.88
Equalling	5.1 mm x 1.4 mm	2 3/4"	5 1/2"	MN51C2112	45.87	39.84	MN51F2112	45.87	39.63	MN51M2112	45.87	39.84
Half Round	5.4 mm x 1.8 mm	2 3/4"	5 1/2"	MN51C2152	50.17	41.30	MN51F2152	50.17	41.30	MN51M2152	50.17	42.88
Round	3.1 mm	2 3/4"	5 1/2"	MN51C2162	45.87	39.63	MN51F2162	45.87	39.63	MN51M2162	45.87	39.84
Warding	5.1 mm x 1.4 mm	2 3/4"	5 1/2"	MN51C2122	45.87	39.84	MN51F2122	45.87	39.63	MN51M2122	45.87	39.63

612

CRATEX® 84 Pc. Rubberized Abrasive Kit

Contents Includes:

- (8) Tapered edge wheels No. 2
- (8) Straight wheels No. 44
- (16) Straight wheels No. 74
- (8) Straight wheels No. 86
- (16) Cylinder points No. 6
- (16) Bullet points No. 8
- (8) Bullet points No. 10
- (2) Wheel mandrels No. 3
- (2) Point mandrels No. 4
- Equally assorted in the four Cratex grit textures - C (Coarse), M (Medium), F (Fine), XF (Extra Fine)



Order No.	Regular Price	SALE
MG64777	212.60	159.06

23009

SURF PRO Wheel Dresser Sticks

Rapid, economical way to dress grinding wheels.



Width	Thickness	Overall Length	Order No.	Regular Price	SALE
1"	1"	6"	MJ55116	10.06	5.95
1"	1"	8"	MJ55118	12.41	8.95

25467

NORTON 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	109.40	87.00
BC2M7	7/16"	2"	7"	MH63BC95001	109.40	87.00
BC3M6	3/8"	2"	10"	MH63BC95002	121.59	96.31
BC3M7	7/16"	2"	10"	MH63BC95003	121.59	96.31
BC5M6	3/8"	2"	14"	MH63BC95004	144.83	114.19
BC5M7	7/16"	2"	14"	MH63BC95005	144.83	114.19

24162

DESMOND® Huntington Pattern Hooded Grinding Wheel Dresser Model No. 0

- Designed for dressing, truing & removing glaze
- Fulfills most general dressing needs where fast dressing is required
- Cutters have a star shaped teeth that expose new abrasive grains
- For up to 10" diameter wheels with 2" face or less
- Replacement cutter sets are available



Order No.	Regular Price	SALE
LG500	39.41	34.60

23077

CGW EZ Red Heavy Duty Strip Wheels

- Non-woven material for cleaning welds and fast removal of rust, scaling, oxidation, paints, sealants, and other clogging materials
- Can be used on stainless steel, steel, aluminum, titanium, non-ferrous metals, fibre glass, stone and wood
- Red rigid wheels for faster working on angled and irregular surfaces
- Black wheels clean surfaces and can provide a satin finish



Diameter	Color	Maximum RPM	Order No.	Regular Price	SALE
4 1/2"	Black	11000	MG9059201	18.32	13.66
4 1/2"	Red	11000	MG9059205	20.14	15.01
4 1/2"	Black	11000	MG9059200	15.69	11.72
4 1/2"	Red	11000	MG9059204	17.45	13.05
7"	Black	7000	MG9059203	29.99	24.00

28633

WEILER Stringer Bead Wire Wheels

- Narrow Face Brushes are Suitable for Cleaning Root and Hot Passes and Reaching Into Corners



Diameter	Width	Maximum RPM	Order No.	Regular Price	SALE
4"	3/16"	20,000	MK5113131	38.84	30.20
4"	3/16"	20,000	MK5113138	72.54	53.80
4"	-	12,500	MK5179801	46.63	35.60
4 1/2"	3/16"	12,500	MK5113232	42.09	32.50
4 1/2"	3/16"	12,500	MK5113238	82.77	60.90
6"	3/16"	12,500	MK5109400	61.07	45.70
6 7/8"	3/16"	9,000	MK5109000	57.47	43.20
7"	1/2"	12,500	MK5179800	57.28	43.10

25433

SURF PRO 25 Pc. Rubber Sanding Drum Set

Contains 1 Each:

- 1/2 x 1/2, 3/4 x 1, 1 x 1, 1-1/2 x 1-1/2, 2 x 2-1/2 Rubber mandrels
- 20 Bands - 10 coarse grit & 10 fine grit
- Fitted plastic case



Order No.	Regular Price	SALE
MM54SDK25	39.17	29.00

689

POWER TOOLS

'The Original' Dynafile® 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 Dynafile 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	1104.16	914.66

2167

Air Powered High Speed Sanders 5"



505710



FP8965



505710

Brand-Name	Features	Sander Type	Maximum RPM	Air Inlet Size	Spindle Thread	Average Air Consumption	Order No.	Regular Price	SALE
Chicago Pneumatic	Rugged 1/2 HP motor with low vibration, variable speed throttle, built-in regulator	Angle	16,000	1/4" NPT	7/16"-20	12,00 CFM	PF50CP9778	287.00	207.20
Florida Pneumatic	Ideal for feathering, touch-up and production sanding, 4-vane motor for low vibration, spring mounted trigger, features an impact resistant handle	Angle	20,000	1/4" NPT	7/16"-20	4,00 CFM	PF52FP2000	120.41	96.30
PRM Pro	Perfect for feathering, touch-up and production sanding, built-in air regulator, complete with sanding pad sizes 3", 4-1/2" and 5-1/2", contoured trigger throttle for positive sanding control	Angle	18,000	1/4" NPT	7/16"-20	17,00 CFM	PJ707600	69.41	50.95

1946

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	91.64	71.00
Straight	All ball bearing construction, lever throttle for positive speed control, complete with collet wrenches	22,000	4 CFM	1/4" NPT	PJ60DG1	54.11	41.00
Straight	Extended heavy duty spindle, lever type throttle	22,000	16 CFM	1/4" NPT	PJ60RG38A	177.22	120.20

22669

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	341.73	243.20
PRM Pro	54,000	PJ65TG11A	149.95	130.95

2316

Pedestal Spring Rewind Reels

- Sturdy single pedestal reel with space saving design facilitates workplace organization
- Guide arm adjusts to wall, floor, vehicle and overhead positions
- Solid one piece, heavy gauge 1/4" steel base and support post for maximum stability
- 1" Solid steel axle and lubricated precision bearings for smooth rotation



Spring Driven

EZ-Coil

EZ-Coil							
Hose ID	Hose Length	Width	Length	Height	Order No.	Regular Price	SALE
1/4"	25 Feet	17-1/8"	18-5/8"	7"	LT55EZPLP125	530.18	477.20
3/8"	25 Feet	13-1/2"	14-7/8"	8-1/2"	LT55EZPLP325	567.10	510.40
3/8"	50 Feet	13-1/2"	14-7/4"	8-1/2"	LT55EZPLP350	738.41	664.60
1/2"	50 Feet	15-1/4"	16-1/2"	6"	LT55EZPLP450	818.15	736.30

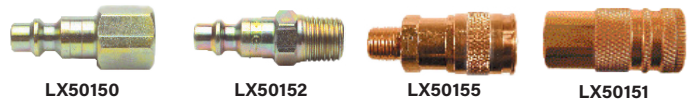
Spring Driven							
Hose ID	Hose Length	Width	Length	Height	Order No.	Regular Price	SALE
1/4"	25 Feet	19-1/2"	21-1/4"	10-1/4"	LT55PLP125	409.08	368.20
3/8"	25 Feet	19-1/2"	21-1/4"	8-1/4"	LT55PLP325	446.00	401.40
3/8"	50 Feet	24"	25-1/2"	9-3/8"	LT55PLP350	617.31	555.60
1/2"	50 Feet	19-1/2"	21-1/4"	9-3/8"	LT55PLP450	697.06	627.40

2073

Industrial Air Interchange Couplers & Connectors

15 Series

- A drag guard protects the sliding sleeve from being snagged or uncoupled
- Six stainless steel locking balls provide greater surface contact with the connector for a more balanced & secure connection
- All 1/4" body couplers are brass



LX50150

LX50152

LX50155

LX50151

FNPT, Interchange Coupler			
Thread Size	Order No.	Regular Price	SALE
1/4"	LX50150	12.41	8.86
3/8"	LX50151	15.60	15.30

MNPT, Interchange Coupler			
Thread Size	Order No.	Regular Price	SALE
1/4"	LX50152	8.88	8.81
3/8"	LX50155	16.04	15.70

23000

Crescent H.K. Porter Strap Cutters

- Shear-cut blades give clean smooth easy cuts
- Workhead has black oxide, clean resistant finish
- Cushion grip handles



Length	Flat Cut	Round Cut	Order No.	Regular Price	SALE
9"	3/4" x .035	Up to 14 Gauge	KR550990T	331.88	323.73
12"	1 1/4" x .050	-	KR551290G	320.44	307.89
24"	2" x .050	-	KR552690GP	721.03	700.04

6697

Lufkin COMMAND CONTROL SERIES™ YELLOW CLAD TAPE MEASURE

- Matte clear protective blade coating for better visibility and durability of the blade
- Tether hole for safely working at heights
- 360-degree end hook and 12-foot standout make one-person use easier
- Anti-pinch, fingertip control feature for increased control when retracting the tape
- Protected lock button and 6-point dual material case for increased durability



Blade Length	Blade Width	Graduation	Order No.	Regular Price	SALE
16'	1-3/16'	1/16"	MZ50L1016C02	32.10	28.46
25'	1-3/16'	1/16"	MZ50L1025C02	38.53	35.04
25'	1-3/16'	1/10ths, 1/100ths, 1/16"	MZ50L1025CD02	42.81	36.70
8 m, 26'	1-3/16'	1/16"	MZ50L1025CB02	42.81	41.48
8 m, 26'	1-3/16'	1/16"/MM	MZ50L1025CME02	38.53	38.15
30'	1-3/16'	1/16"	MZ50L1030C02	49.24	42.69
35'	1-3/16'	1/16"	MZ50L1035C02	53.52	46.72
10 m, 33'	1-3/16'	1/16"/MM	MZ50L1035CME02	53.52	46.72

30815

LANG CAT III Digital Multimeter Kit

- 600V AC/DC, 10A AC/DC
- 32MΩ resistance
- Frequency to 32kHz
- Continuity and diode test
- Temperature to 1400° F
- RPM for 1-8 cylinders
- Digital display and analog bargraph
- Protective rubber boot
- Tilt stand for hands-free operation
- Dual fuse protection
- Kit includes meter, temperature adapter, thermocoupler, inductive pickup, test leads, fabric pouch



Order No.	Regular Price	SALE
KL4013803	206.87	156.00

3998

Empire Machinist & Carpenter Squares

6" Pocket Square

- 6" Etched blade with inch grads
- Accuracy, square to .001" per inch
- True Blue®



16" Heavy-Duty Professional

- 16" Etched blade with inch grads
- Accuracy, square to .001" per inch
- True Blue®

Blade Length	Number of Pieces	Type	Order No.	Regular Price	SALE
16"	1	Combination Square	KP75280	35.20	31.70
6"	1	Pocket Square	KP75255	21.41	16.70

30957

Empire Professional Combination Squares

- 90° and 45° head
- Steel blade
- Self aligning drawbolt
- Full view acrylic vial
- 16" Graduations: 1/8", 1/16"



Blade Length	Order No.	Regular Price	SALE
16"	KP75280	35.20	31.70

30958

wiha Soft Grip Side Drive Balldriver T-Handles

- Soft Grips for incredible comfort
- Chrome-V-Moly Super Tool Steel
- Industrial Black Finish Blades
- Ergonomic Shape For Max Power
- Ball and Hex Drive (based on size)



Hex Key			
Ball End Size	Order No.	Regular Price	SALE
5/64"	KN5433418	9.28	6.95
3/32"	KN5433420	9.28	6.95
7/64"	KN5433422	9.68	6.95
1/8"	KN5433424	9.68	6.95
9/64"	KN5433426	9.68	6.95

Dual Drive Ball End Hex			
Ball End Size	Order No.	Regular Price	SALE
5/32"	KN5433428	9.68	6.95
3/16"	KN5433430	10.84	7.95
7/32"	KN5433432	12.33	8.95
1/4"	KN5433433	14.24	9.95
5/16"	KN5433439	17.54	11.95
3/8"	KN5433440	24.33	16.00

7996

MAG-MATE Rare Earth Pot Magnets

The ultimate magnet that combines strength, and reach out, through air gaps in the smallest possible package

- Neodymium-Iron-Boron core
- Brass separator encased in a precision ground steel cup



Diameter	Thread Size	Thickness	Maximum Holding Capacity	Style	Order No.	Regular Price	SALE
3/8"	#8-32	1/2"	5 lbs	Two-Pole	NE7010400	26.55	23.90
1/2"	#10-24	1/2"	10 lbs	Two-Pole	NE7010405	28.89	26.00
3/4"	#10-24	1/2"	20 lbs	Two-Pole	NE7010410	39.37	35.40
1"	1/4"-20	1/2"	30 lbs	Two-Pole	NE7010415	54.79	49.30
1 1/4"	5/16"-18	1/2"	40 lbs	Two-Pole	NE7010425	76.45	68.80

23795

HAND TOOLS

NG Handles & S & N Holders



For Use With	Type	Order No.	Regular Price	SALE
N Blades	N Blade Holder	FN55EL01003	9.66	6.25
S Blades	S Blade Holder	FN55EL02003	9.66	6.25
S Blades	NG-1 Handle	FN55NG1000	12.07	9.95
N Blades	NG-2 Handle	FN55NG2000	12.40	9.95
All Blade Holders	NG-3 Handle	FN55NG3000	12.40	9.95

24075

Replacement Blades



Application	Blade Type	Shaviv Equivalent	Order No.	Regular Price	SALE
Steel, Aluminum, Plastic, Carbide	B10CO	None	FN55B10CO	3.64	2.50
Steel, Aluminum, Plastic	N1	B10	FN55N1	2.84	1.75
Steel, Aluminum, Plastic, Solid Carbide	N1C	B10C	FN55N1C	10.26	6.95
Steel, Aluminum, Plastic, Diamond Coated	N1D	None	FN55N1D	17.37	14.00
Steel, Aluminum, Plastic - Left Handed	N1LH	None	FN55N1LH	4.02	2.50
High Wear Materials, TiN Coated	N1TiN	B10P	FN55N1TiN	3.74	2.95
Brass, Cast Iron	N2	B20	FN55N2	2.85	1.95
Brass, Cast Iron	N2C	B20C	FN55N2C	10.28	6.95
Remove External & Internal Burrs	N3	B30	FN55N3	3.67	2.95
Inside Cross Holes and Back Side of Walls	N6	B60	FN55N6	5.55	3.95
Steel, Aluminum, Plastic	S10	E100	FN55S10	3.77	2.50
Stainless Steel	S100	None	FN55S100	4.36	2.95
Small Holes	S101	None	FN55S101	3.86	2.50
Small Holes - Left Handed	S101LH	None	FN55S101LH	4.58	2.95
Steel, Aluminum, Plastic, Diamond Coated	S10D	None	FN55S10D	17.85	11.95
Steel, Aluminum, Plastic - Left Handed	S10LH	None	FN55S10LH	5.16	3.50
High Wear Materials, TiN Coated	S10TiN	E100P	FN55S10TiN	4.77	3.85
Very Small Holes	S150	None	FN55S150	4.30	2.95
Very Small Holes, TiN Coated	S150-TiN	None	FN55BK3112	4.97	4.20
Brass, Cast Iron	S20	E200	FN55S20	4.09	2.50
Fine Point for Brass + Cast Iron	S202	None	FN55S202	4.30	2.95
Remove External & Internal Burrs	S30	E300	FN55S30	4.13	2.75
For Straight Edges	S35	E350	FN55S35	4.22	2.75
Inside Cross Holes and Back Side of Walls	S60	E600	FN55S60	5.84	3.95

10109

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



Range	Included	Type	Order No.	Regular Price	SALE
3-5.5 mm	Steel Handle / R1 Blade	Mini-Reversible Set	FN55RC1000	41.66	35.20
5-10 mm	Steel Handle / R2 Blade	Medium-Reversible Set	FN55RC2000	41.66	35.40
10-22 mm	Steel Handle / R3 Blade	Large-Reversible Set	FN55RC2200	49.55	42.10
3.5 - 22 mm	Set of all 3	Mini, Medium, Large	FN55RC3300	132.85	112.90

24099

Magnetic Soldering Clamp

- Clamp offers an extra pair of hands when soldering
- Alligator clamps firmly hold wire and small parts
- Flexible design promotes different holding positions
- Clips and base are magnetic
- Arms are magnetic and can be removed and used without the base
- Base is hex shape to fit in a vise



Order No.	Regular Price	SALE
KN6555000	29.72	24.00

2763

Diamond Sharpening Hones

- A quick easier way to hand sharpen both cutlery and tools
- The diamond abrasive is treated to be tougher and last longer
- Available in: fine, medium, and coarse
- Size of abrasive part: 2"L x 3/4"W - 5-7/8" OAL



Grade	Order No.	Regular Price	SALE
Coarse	FT65EZELC	16.09	12.90
Fine	FT65EZELF	10.71	8.50
Medium	FT65EZELM	13.38	10.71

23132

5 Pc. General Hammer Set

- Comfortable, textured handles for handling ease
- Contains 1 of each
- 16 Oz ball pein hammer
- 32 Oz ball pein hammer
- 32 Oz rubber mallet
- 3 Lb. sledge hammer
- 3 Lb. cross pein hammer



Set Includes	Order No.	Regular Price	SALE
(1) 16 oz and (1) 32 oz Ball Pein Hammer; (1) 32 oz Rubber Mallet; (1) 3 lbs Sledge Hammer; (1) 3 lbs Cross Pein Hammer	KP8263125	169.52	106.40

7893

WILLIAMS Deadblow Hammers

- Handles are ergonomically designed
- Hard urethane construction
- Resists cut damage to hammer head
- Provides a non-marring contact surface
- Is non-sparking because of no metal-to-metal contact during application
- Will not absorb liquids
- Dead blow feature minimizes hammer bounce back



Head Weight	Head Diameter	Handle Length	Order No.	Regular Price	SALE
16 oz	1 1/2"	10"	KP30JHW16	60.39	35.49
32 oz	2 1/4"	11 1/2"	KP30JHW32	81.24	47.33
48 oz	2 5/8"	11 1/2"	KP30JHW48	107.52	62.34
56 oz	2 1/2"	16"	KP30JHW56	145.56	83.96

7573

ACCKETT Brass Hammers

- Barrel type heads
- Polished hickory handles with non-slip grip



Head Weight	Order No.	Regular Price	SALE
1/2 lbs	KY51B1	99.79	67.10
1 lbs	KY51B2	111.75	74.80
2 lbs	KY51B4	151.67	96.20
3 lbs	KY51B5	263.45	151.50
4 lbs	KY51B6	315.34	187.60
5 lbs	KY51B7	383.17	223.60

23287

MAYHEW 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	34.51	29.30
5/8"	16"	KS50469	43.91	37.30
3/4"	20"	KS50471	55.38	47.10
3/4"	24"	KS50472	64.23	54.60
7/8"	30"	KS50473	85.57	72.70

6872

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	12.76	10.95
18"	LC717794	14.74	12.95
20"	LC715032	16.67	13.95
24"	LC717795	19.18	16.00

6947

IRWIN VISE-GRIP "The Original" Locking Pliers

- Curved and straight jaws
- Wire cutters available
- Tremendous pressure applies when closed
- Guarded release trigger to protect against accidental release
- Hardened teeth to grip from any angle



Curved						
Overall Length	Jaw Capacity	Jaw Thickness	Wire Cutter	Order No.	Regular Price	SALE
4"	15/16"	1/4"	Yes	KX504WR	24.35	21.00
5"	1 1/8"	1/4"	Yes	KX505WR	34.31	27.00
7"	1 1/2"	5/16"	Yes	KX507WR	35.21	28.00
7"	1 5/8"	5/16"	-	KX507CR	35.21	28.00
10"	1 7/8"	3/8"	Yes	KX5010WR	35.86	29.00
10"	1 7/8"	3/8"	-	KX5010CR	35.86	29.00

Straight						
Overall Length	Jaw Capacity	Jaw Thickness	Wire Cutter	Order No.	Regular Price	SALE
7"	1 5/16"	5/16"	No	KX507R	35.21	28.00
10"	1 3/4"	7/16"	No	KX5010R	35.86	29.00

6796

MAG-MATE Inspection Mirror/Magnet

Combination Tools

- Ideal to see behind, underneath or around machinery
- Telescoping mirror for versatility
- Powerful rare earth magnets on the opposite end
- Use the magnet to retrieve metal items or as a magnetic base to hold the inspection mirror in place



Mirror Width	Mirror Length	Material	Overall Length	Extended Length	Pull	Order No.	Regular Price	SALE
2"	2"	Glass	6 1/4"	28"	2 lbs	NE70301G240	23.56	18.00
1 1/2"	1 1/2"	Glass	6"	23 1/2"	2 lbs	NE70306G240	32.07	25.00
3"	2"	Stainless	8 1/4"	38"	7 lbs	NE70314S925	67.95	52.00
1 1/4"	2"	Glass	6"	24 1/4"	2 lbs	NE70315G240	32.07	25.00
2 1/2"	1 7/8"	Acrylic	7 3/4"	32 1/2"	12 lbs	NE70321A931	70.30	53.00
-	-	Glass	14 1/4"	14 1/4"	20 lbs	NE70375G990	124.81	94.00

4044

MAG-MATE Stainless Steel Inspection Mirrors

- Ideal for use in critical areas where foreign objects cannot be left behind
- FOD free and great for high heat areas
- Telescoping shafts and non-slip solvent resistant grips on all models except NE701MS103 and NE701MS105 which have knurled handles and bendable shafts



Mirror Diameter	Overall Length	Extended Length	Shape	Order No.	Regular Price	SALE
3/8	11-1/2	11 1/2"	Round	NE701MS103	42.06	32.00
1/2	12	12"	Round	NE701MS105	42.34	32.00
1-1/4	35	35"	Round	NE701MS115	43.67	33.00
2-1/4	36	36"	Round	NE701MS123	43.48	33.00
2 x 1	36	36"	Oval	NE701MS210	43.51	33.00
2 x 2	35-1/2	35 1/2"	Rectangular	NE701MS223	43.79	33.00
3 x 2	37	37"	Rectangular	NE701MS234	45.13	34.00

4050

HAND TOOLS

PROTO Diagonal Cutting Pliers

- Induction hardened cutting edges
- Thin narrow jaws for access in tight areas
- Plastisol grips for added comfort



Overall Length	Jaw Width	Style	Model No	Order No.	Price	SALE
4 1/2"	9/16"	With Coil Spring	J204SG	KP4230285	50.88	36.02
5"	19/32"	With Grip	J205G	KP4230290	49.43	34.72
6"	3/4"	With Grip	J206G	KP4230295	49.62	33.34
7"	7/8"	With Grip	J207G	KP4230300	55.13	38.19
4 5/8"	7/16"	With Grip	J285G	KP4230310	47.85	33.81
8"	17/32"	Angled Head	J210AHG	KP4230315	68.15	44.90

24510

PROTO Needle Nose Pliers

- Induction hardened cutting edges
- Diamond serrated jaws
- Plastisol grips for added comfort



Jaw Length	Jaw Width	Side Cutter	Order No.	Regular Price	SALE
1 7/8"	11/16"	No	KP4230190	52.23	36.45
1 3/16"	7/16"	No	KP4230215	46.27	31.64
1 7/8"	11/16"	Yes	KP4230217	55.26	37.89
2 5/8"	3/4"	Yes	KP4230220	65.27	44.29

7304

CHAN NEL LOCK Multi-Purpose Plier Sets

- 2 Pc. GS1 tongue & groove 6-1/2" and 9-1/2", right angle teeth, offset head, vinyl comfort grip
- 3 Pc. GLS3 Griplock® 6-1/2, 10, & 12", special jaw accommodates many shapes, vinyl comfort grips
- 5 Pc. CBR5 9-1/2" high leverage linemen's plier, 10" tongue and groove plier, 8" diagonal cutting plier, 8" long nose plier with cutter, 8" Wide Azz adjustable wrench, & Santoprene soft handles
- 8 Pc. CBR8 10" tongue and groove pliers, 9-1/2" tongue and groove pliers, 8-1/2" long-nose pliers with cutter, 8" cutting pliers - lap joint, 8" end cutter, 9-1/2" crimping tool, 9" cable cutter, 9" high-leverage linemen's pliers & Santoprene soft handles



Number of Pieces	Handle Type	Order No.	Regular Price	SALE
2	Vinyl Grip	LB50GS1	57.05	49.59
3	Vinyl Grip	LB50GLS3	90.70	75.55
8	Cushion Grip	LB50CBR8	510.35	418.57

22931

CHAN NEL LOCK Tongue & Groove Pliers

- Straight jaw
- Patented undercut tongue and groove design assures no slip jaw action
- Channellock Blue® comfort grips



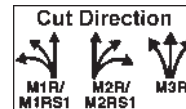
Overall Length	Round Capacity	Order No.	Regular Price	SALE
4 1/2"	1/2"	LB50424	29.92	26.06
6 1/2"	7/8"	LB50426	25.85	22.52
9 1/2"	1 1/2"	LB50420	31.19	27.08
10"	2"	LB50430	32.45	28.19
12"	2 1/4"	LB50440	36.81	32.05
16 1/2"	4 1/4"	LB50460	63.47	53.72

22939

CRESCENT WISS Snips

Metalmaster® Compound Action Snips

- M1R cuts left from tight curves to straight, and has red vinyl grips
- M2R cuts right from tight curves to straight, and has green vinyl grips
- M3R cuts straight, and has yellow vinyl grips



Metalmaster® Special Series Snips

- Specially hardened for unusual industrial requirements
- Up to 18 Gauge capacity

Metalmaster Compound Action Snip					
Left/Right Hand	Blade Length	Overall Length	Order No.	Regular Price	SALE
Left	1 3/8"	9 3/4"	LA50M1R	44.41	43.00
Right	1 3/8"	9 3/4"	LA50M2R	44.41	43.00
Left/Right	1 1/2"	9 3/4"	LA50M3R	44.41	43.00

25565

CBR Manual Puller Set - PM4

Set of 4 Pullers

- (1) Model 104: 3 Jaw 4" 5 Ton
- (1) Model 106: 3 Jaw 6" 10 Ton
- (1) Model 206: 2 Jaw 6" 6 Ton
- (1) Model 110: 3 Jaw 10" 20 Ton
- (1) P4: Tip protector
- (2) P6: Tip protectors
- (1) P10: Tip protector
- (1) Tool board & accessories
- Tool board size: 16" x 26" (406mm x 660mm)



Order No.	Regular Price	SALE
KL52PM4	1691.48	1595.24

6971

MAYHEW 16 Pc. Hollow Punch Set (SAE)

Set Includes:

- Handle and centering point
- 1/8" Hollow punch
- 3/16" Hollow punch
- 1/4" Hollow punch
- 5/16" Hollow punch
- 3/8" Hollow punch
- 7/16" Hollow punch
- 1/2" Hollow punch
- 9/16" Hollow punch
- 5/8" Hollow punch
- 3/4" Hollow punch
- 7/8" Hollow punch
- 1" Hollow punch
- 1-1/16" Hollow punch
- 1-1/8" Hollow punch
- 1-3/16" Hollow punch
- Plastic case



Order No.	Regular Price	SALE
KS5066000	536.64	456.10

6856

WORLD CLASS QUALITY Transfer Punch Set

With Indexed Stand 1/2" thru 1" by 64ths - 33 Punches

- Heat treated tempered steel
- Black oxide finish



Order No.	Regular Price	SALE
KH55NTP33	161.22	107.00

7915

Young Bros. 36 Pc. Combination Sets

Letters & Figures

- Each stamp has one thumb groove
- Fine quality steel, special heat treatment gives three distinct hardness zones
- Sharp characters in gothic style insure deep, clear impressions
- Crown hammer end
- Consists of A-Z period and 0 to 9 interchange



Character Size	Order No.	Regular Price	SALE
1/16"	KF5001361	134.05	123.79
3/32"	KF5002361	134.05	123.79
1/8"	KF5003361	134.05	123.79
3/16"	KF5005361	167.39	154.58
1/4"	KF5006361	197.82	182.71
3/8"	KF5008361	307.96	284.43
1/2"	KF5009361	459.41	424.35

25585

LANG 3 Pc. Thread Restorer File Set

- Restores damaged external threads, any diameter, right or left hand
- Files are highly tempered for strength and durability
- Pitches included on SAE rethread files (threads per inch): 9, 10, 11, 12, 13, 14, 16, 18, 20, 24, 27, 28, 30
- Pitches included on metric rethread files (millimeters per thread): .75, 1.00, 1.25, 1.50, 1.75, 2.00, 2.50, 3.00



Order No.	Regular Price	SALE
KL402573	59.90	39.80

23676

Eklind. Ergo-Fold™ Hex Key Sets

- Fold up sets
- Standard or metric
- Ergonomic comfort grip
- Guaranteed forever



Number of Pieces	Sizes Included	Order No.	Regular Price	SALE
6	3 mm, 4 mm, 5 mm, 6 mm, 8 mm, 10 mm	KM5025161	26.28	22.60
7	1.5 mm, 2 mm, 2.5 mm, 3 mm, 4 mm, 5 mm, 6 mm	KM5025171	17.88	16.80
6	5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	KM5025611	26.67	21.50
9	5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4"	KM5025911	18.50	17.50

23147

BONDHUS Double Sided Ball End L-Wrenches

- Much better leverage angle than ever before!
- Exclusive MaxTorque™ ball end delivers 50% more torque than conventional ball ends
- Short ball end inserts into screw and works at a 15° angle
- Standard Bondhus ball end on long arm inserts into screw and works at a 25° angle
- Lifetime warranty



Number of Pieces	Sizes Included	Arm Type	Driver Style	Order No.	Regular Price	SALE
13	0.05", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	Long	Double Ball	KN5367037	57.87	30.80
9	1.5 mm, 2 mm, 2.5 mm, 3 mm, 4 mm, 5 mm, 6 mm, 8 mm, 10 mm	Long	Double Ball	KN5367099	46.86	24.90

6520

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"



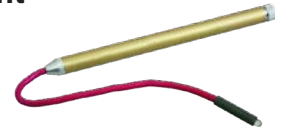
KN5466991 KN5466990

Number of Pieces	Order No.	Regular Price	SALE
9	KN5466990	77.30	47.90
13	KN5466991	95.71	59.30

25513

Lisle LED Flexible Flashlight

- Flexible wire works around obstructions & holds the shape you give it
- White light brightly illuminates even the tightest work area
- Uses 3 AAA batteries, not included
- LED Bulb lasts for up to 10,000 hours



Order No.	Regular Price	SALE
KN6535900	50.75	36.10

2762

APEX Phillips Bits

- Meets the most stringent government and military specifications
- Precise with fasteners
- Increased longer lasting up to 10x's



Tip Size	Drive Size	Overall Length	Model No	Order No.	Regular Price	SALE
#1	1/4"	1"	440-1X	KW7060015	1.95	1.50
#2	1/4"	1 1/2"	440-215X	KW7060020	3.86	2.95
#2	1/4"	2"	440-22X	KW7060025	3.96	2.95
#2	1/4"	1"	440-2X	KW7060035	1.86	1.50
#3	1/4"	1"	440-3X	KW7060040	1.86	1.50
#4	1/4"	1 5/16"	440-4X	KW7060045	6.74	5.00
#2	5/16"	1 1/4"	480-2X	KW7060065	3.63	2.95
#3	5/16"	1 1/4"	480-3X	KW7060075	3.63	2.95

6465

HAND TOOLS

wiha Cushion Grip Equipment Screwdriver Sets

Sets

- Precision machined exact fit phillips tips
- Heavy duty hex blade of wiha crm-72 tool steel
- Through hardened for maximum durability
- Hard chromed finish, best wear & corrosion resistance
- Molded on cushion grips



Number of Pieces	Sizes Included	Order No.	Regular Price	SALE
8	Slotted: 3 mm, 4 mm, 5.5 mm, 6.5 mm, 8 mm, Phillips: #1, #2, #3	KN5430298	118.36	78.00
20	Slotted: 3, 4, 5.5, 6.5, 8 mm, Phillips: #0, #1, #2, Square: #1, #2, #3, Pozidriv: #1, #2, Torx: T6, T8, T10, T15, T20, T25, T30	KN5430299	250.80	164.00

25498

WILLIAMS 4 Pc. Mini Pick & Hook Set

Bi-Mold Comfort Grip Handles

- Bi-mold handles provide comfortable grip, reducing hand fatigue
- Use for scribing, alignment, o-ring removal, and parts cleaning
- Small size makes them ideal for hard to reach work surfaces
- **Contents:** straight pick, 45° bent tip pick, 90° bent tip pick, full semi-circular hook
- Lifetime warranty



Order No.	Regular Price	SALE
KP3040201	47.75	32.55

7549

CDI TORQUE Micro-Adjustable Torque

Screwdrivers

- Positive locking pull down adjustment knob
- Trilobular comfort grip
- Universal 1/4" hex bit holder with strong rare earth magnet
- Cam-over torque limiting clutch
- Easy-to-read window scale
- Lightweight ease-of-use
- Automatic lock in counterclockwise direction
- Accuracy +/- 6% clockwise direction, from 20-100% of full scale
- Individually serialized with matching certificate of calibration traceable to N.I.S.T.



Minimum Torque	Maximum Torque	Increments	Order No.	Regular Price	SALE
10 cNm	80 cNm	1 cNm	KL4561NSM	501.83	372.00
40 cNm	200 cNm	2 cNm	KL45151NSM	466.62	372.50
50 cNm	450 cNm	5 cNm	KL45401NSM	537.85	398.57
3 inch/lbs	15 inch/lbs	0.2 inch/lbs	KL45151SM	513.30	380.19
5 inch/lbs	40 inch/lbs	0.5 inch/lbs	KL45401SM	537.85	398.57
20 inch/oz	100 inch/oz	1 inch/oz	KL4561SM	511.58	379.15

7489

CHANNEL LOCK Slim Jaw Wrenches

- Xtra Slim 3/16" jaws means maximum accessibility
- Super wide opening lets you tackle big jobs with a compact wrench
- 4 Thread knurl & non-protruding jaws provide greater capacity
- Minimal head width improves performance in confined spaces



Overall Length	Jaw Capacity	Finish	Order No.	Regular Price	SALE
7"	3/16"	Chrome	LB506SWCB	63.42	44.33
8 1/2"	3/16"	Chrome	LB5085SWBC	67.47	47.11

6558

CRESCENT Aluminum Pipe Wrenches

- K9™ jaw technology allows bite in an arc of 30 degrees for greater access in tight spaces; 25% larger bite surface
- Adjustment ring thread pitch angled for 2x faster opening and closing of wrench jaw
- Aluminum design is up to 10% lighter than competitive wrenches
- 25% larger bite surface provides maximum grip helping to increase tooth durability and life
- 40% less weight helps reduce user fatigue
- Handle shape optimized for maximum power and user comfort
- Exceeds federal torque load specification by over 140%



Overall Length	Jaw Capacity	Order No.	Price	SALE
9"	0"-1.9"	KW50CAPW10S	74.93	73.21
11.75"	0"-2.375"	KW50CAPW14	104.91	104.06
17.5"	0"-2.375"	KW50CAPW14L	117.76	110.54
14.75"	0"-2.875"	KW50CAPW18	137.03	128.97
20.5"	0"-3.5"	KW50CAPW24	211.99	187.92

30629

LANG 6 Pc. Finger Ratchet Bit Driver Set

Set Includes:

- (1) Bit driver with magnetic bit retention
- (1) each #1 and #2 Phillips bit
- (1) 1/4" Slotted bit
- (1) 1/4" Square drive bit
- Plastic case
- Black oxide finish



Set Includes	Order No.	Regular Price	SALE
1) Bit driver with magnetic bit retention; (1) each #1 and #2 Phillips bit; (1) 1/4" Slotted bit; (1) 1/4" Square drive bit; Plastic case	KL405222	41.95	25.80

23679

GEARWRENCH Gimbal Ratchets with Pivoting Mechanism

- Gimbal design allows ratchet to pivot in two directions for easier access
- 72-Tooth ratcheting mechanism for 5° swing arc
- Anodized aluminum finish
- Easy to use forward / reverse lever



Drive Size	Order No.	Regular Price	SALE
1/4"	KP6581027	54.91	48.17
3/8"	KP6581270	38.88	35.77

6640

BAUSCH+LOMB Pre-Moistened Lens Cleaning Tissues

- Non-silicone based, anti-fog, anti-static, individually-packaged tissues treated with special surfactants clean all glass and plastic lenses.
- Easy, convenient to use. Perfect for home, light industrial, office, toolbox, glove box, car or truck
- Excellent for computer screens, automobile mirrors and more
- 100 Tissues per box



Order No.	Regular Price	SALE
KA408574GM	22.92	21.50

22761

PRM PRO Mill Hand Files- Professional Grade

- Excellent for a wide-range of applications
- Used for sharpening, lathe work, draw filing, and typical general-purpose applications
- Three cuts: Bastard for coarse filing, 2nd cut for moderate stock removal and Smooth for finishing
- 100% warranty against manufactures defect



Overall Length	2nd Cut			Bastard			Smooth		
	Order No.	Reg-ular Price	SALE	Order No.	Reg-ular Price	SALE	Order No.	Reg-ular Price	SALE
4"	-	-	-	PR0410104	5.87	5.79	PR0410204	7.04	6.95
6"	PR0410006	7.45	6.95	PR0410106	6.00	5.05	PR0410206	7.52	7.09
8"	PR0410008	9.31	8.95	PR0410108	7.52	7.09	PR0410208	9.46	8.95
10"	PR0410010	11.32	9.95	PR0410110	10.43	9.95	PR0410210	12.70	10.95
12"	PR0410012	15.32	12.95	PR0410112	14.83	12.95	PR0410212	17.66	13.95
14"	-	-	-	PR0410114	22.91	18.00	PR0410214	28.37	22.00

28638

EXXO 4 Pc. Demolition Set

- 4 Pc. set consists of 12" and 18" plastic handle pry bars, 15" utility flat bar and 24" wrecking bar.
- Versatile set for industrial, automotive, workshop and construction.



Order No.	Regular Price	SALE
HY50P6064	41.49	33.20

6619

KLEIN TOOLS 6 Pc. Screwdriver Set

- Cushion-Grip handle for greater torque and comfort
- Premium chrome-plated
- Internal flanges inside handle provide solid, twist-resistant blade anchor
- Special heat-treated shafts and non-magnetic bits
- Precision-machined tip for exact fit
- Tip-Ident® quickly identifies the screwdriver type and tip orientation



Number of Pieces	Sizes Included	Manufactur-erNo	Order No.	Regular Price	SALE
6	3/16" Cabinet; 1/4" and 5/16" Key-stone and #1, #2 and #3 Phillips	85074	KP6011775	123.05	88.20

28845

KLEIN TOOLS Ironworker's Pliers

- Twists and cuts soft annealed rebar tie wire
- Spring-loaded or standard
- Induction hardened cutting knives for long life
- No wobble handle
- Unique handle tempering helps absorb the "snap" when cutting wire
- Made in USA



Overall Length	Jaw Width	Jaw Length	Jaw Thickness	Side Cutter	Handle Style	Manufactur-erNo	Order No.	Regular Price	SALE
9"	1.156"	1-19/64"	1/2"	Yes	Plain Black Steel	201-7CST	KP6011010	89.47	80.50
9"	1.156"	1-19/64"	1/2"	Yes	Plastic Blue	D201-7CST	KP6011035	89.47	80.50
9 1/2"	1.156"	1-19/64"	1-9/32"	Yes	Plastic Red	D201-7CS-TA	KP6011040	91.06	82.00

28925

KLEIN TOOLS Heavy-Duty Ironworker's Pliers

- Twists and cuts soft annealed rebar tie wire
- Cuts ACSR, screws, nails and most hardened wire
- High-leverage design has 46-percent more cutting power
- Hook bend handle
- Spring-loaded action for self-opening
- Induction hardened cutting knives for long life
- Hot-riveted joint ensures smooth action and no handle wobble
- Heavy-duty knurled jaws
- Unique handle tempering helps absorb the "snap" when cutting wire
- Precision-hardened plier head for on-the-job toughness



Overall Length	Jaw Width	Jaw Length	Jaw Thickness	Side Cutter	ManufacturerNo	Order No.	Reg-ular Price	SALE
9"	1 1/8"	1-19/64"	1/2"	Yes	D2000-7CST	KP6011015	112.21	101.00
9 1/2"	1-1/4"	1-19/32"	5/8"	Yes	D2000-9ST	KP6011030	118.59	106.70

28926

KLEIN TOOLS 9" New England Nose Lineman's Pliers

- Klein Tools makes some of the world's finest pliers
- These High-Leverage, Side-Cutting Pliers features a rivet closer to the cutting edge which provides 46-Percent more cutting and gripping power than other pliers
- Induction hardened cutting knives are extra durable for longer life



Overall Length	Jaw Length	Jaw Width	Jaw Thickness	Side Cutter	Model No	Order No.	Regular Price	SALE
9"	1-19/32"	1-1/4"	5/8"	Yes	D213-9NE	KP6011045	74.01	66.60

29382

KLEIN TOOLS Electrician's Scissors

- Designed for telecom, electrical and heavy-duty use applications
- Strong, tough tempered steel
- Nickel-plated finish resists corrosion
- Scraper and file on outside of both blades
- Screw hinge permits adjustment



Overall Length	Blade Length	Left/Right Hand	ManufacturerNo	Order No.	Regular Price	SALE
5"	1 7/8"	Left/Right Hand	2100-5	KP6011410	39.23	33.41

28960

MEASURING TOOLS

PRO-CHECK Round Bar Center Finder

- Accurately and quickly locates center on round workpiece
- For execution, place the tool in drill chuck or collet and line up pointer with the line scribed on the shaft
- 3/8" Shank diameter
- 4-1/8" Overall length



Order No.	Regular Price	SALE
NE60RBCF38	14.57	9.95

4790

Fowler 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	115.31	84.51

3784

PRO-CHECK Outside Micrometers

- Carbide tipped
- Lock nut
- Supplied with fitted case and adjusting wrench
- Satin chrome finish
- Heat-insulated grip plate
- Ratchet thimble
- 2" and larger supplied with standards



0.001"				
Minimum Measurement	Maximum Measurement	Order No.	Regular Price	SALE
0"	1"	NB60CM001	36.42	23.00

0.0001"				
Minimum Measurement	Maximum Measurement	Order No.	Regular Price	SALE
0"	1"	NB60CRM1	41.38	26.00
1"	2"	NB60CRM2	67.51	42.00
2"	3"	NB60CRM3	55.42	35.00
3"	4"	NB60CRM4	61.37	39.00
4"	5"	NB60CRM5	58.54	37.00
5"	6"	NB60CRM6	64.04	40.00
6"	7"	NB60CRM7	97.07	60.00
7"	8"	NB60CRM8	113.58	70.00
8"	9"	NB60CRM9	150.27	92.00
9"	10"	NB60CRM10	168.63	103.00
10"	11"	NB60CRM11	177.80	109.00
11"	12"	NB60CRM12	188.81	115.00

4733

6" Dial Caliper

- Graduation .001"
- Shockproof dial
- Stainless steel
- Supplied with certification



Model No	Measuring Range	Order No.	Regular Price	SALE
1311-12	0 - 12"	SZ20131112	223.59	168.01
1311-6	0-6"	SZ20131116	100.47	77.94
1311-8	0 - 8"	SZ20131118	133.46	102.27

3939

Fowler Shockproof Dial Calipers

with Thumb Roll

- 4-Way measuring
- Solid stainless steel construction
- Silky smooth movement throughout
- .100"/2mm Range per revolution
- .001"/0.02mm Reading dial face
- Tough shockproof design
- Supplied in shop-hardened case



Measuring Range	Order No.	Regular Price	SALE
0-6"	NA5552008706	146.60	105.53
0-6"	NA5552008707	146.17	112.68
0-8"	NA5552008708	165.32	135.98
0-12"	NA5552008712	228.51	208.42

3708

Fowler Electronic Calipers

- RS232C Direct output
- Hold feature
- Preset mode now includes offset for inside jaws
- All sizes feature fine adjustment screw
- Resolution: .0005"/0.01mm
- Inch/metric conversion
- Includes wooden case

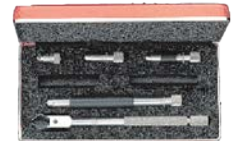


Measuring Range	Inside Jaw Depth	Order No.	Regular Price	SALE
0-12" / 0-300 mm	3.5"	NA5554100312	363.26	290.45
0-24" / 0-600 mm	4"	NA5554100024	593.50	484.73
0-40" / 0-1000 mm	6"	NA5554100042	1881.87	1461.42

3786

Starrett Tubular Inside Micrometers

- 3/8" Diameter rods
- Interchangeable anvils
- Hardened and ground anvils
- Handle
- Complete with carrying case
- .001" Graduation



Measuring Range	Accuracy	Graduation	Order No.	Regular Price	SALE
1-1/2"-8"	0.0001"	0.001"	MV7053050	569.00	524.99
1-1/2"-12"	0.0001"	0.001"	MV7053052	684.00	630.31
4"-24"	0.0001"	0.001"	MV7053054	885.00	814.54
4"-32"	0.0001"	0.001"	MV7053055	981.00	902.35
4"-40"	0.0001"	0.001"	MV7053056	1064.00	978.26

4961

Mitutoyo Dial Calipers

- Smooth sliding
- Shock protection
- Lock screw on bezel
- White face
- 6" and 8" main beam coated with titanium nitride
- .001" Graduation
- .100" Range / revolution
- +/- .002" Accuracy



Measuring Range	Order No.	Regular Price	SALE
0-6"	MT80505-742J	213.88	167.89
0-8"	MT80505-743J	311.48	245.10
0-12"	MT80505-746	475.12	373.02

4113

PRO-CHECK PREMIUM Premier Electronic Calipers

- 3-Way measurement
- Inch/metric conversion
- Hardened stainless steel jaws and depth rod
- Floating zero for comparative measurements
- No SPC output
- Certificate of Inspection included
- 1 Year Warranty



Measuring Range	Order No.	Regular Price	SALE
0-6"/150mm	PC20EDC6	98.09	61.00
0-8"/200mm	PC20EDC8	108.57	67.00
0-12"/300mm	PC20EDC12	181.06	111.00

4572

PRO-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	89.91	56.00
0-6"	0.001"	PC21CDC6B	89.91	56.00
0-6"	0.001"	PC21CDC6CJ	163.29	101.95
0-6"	0.001"	PC21CDC6EM	95.42	62.95
0-150 mm	0.02 mm	PC21CDC6M1	95.42	62.95
0-6"/0-150mm	0.001" / 0.02 mm	PC21CDC6M2	126.62	82.95
0-8"	0.001"	PC21CDC8	90.53	58.95
0-12"	0.001"	PC21CDC12	131.09	85.95

4812

†PC21CDC6EM Metric on scale only

PRO-CHECK Double Squares

- Used for precision layout work
- All blades are hardened and tempered with easy to read markings



Blade Length	Graduation	Order No.	Regular Price	SALE
4"	1/8", 1/16", 1/64", 1/64"	NB60DS404R	36.61	26.60
4"	1/32", 1/64", 1/50", 1/100"	NB60DS416R	36.61	26.60
4"	0.5 mm, 1/32", 1 mm, 1/64"	NB60DS4EM	36.61	26.60
6"	1/8", 1/16", 1/32", 1/64"	NB60DS604R	49.45	35.60
6"	1/32", 1/64", 1/50", 1/100"	NB60DS616R	49.45	35.60
6"	0.5 mm, 1/32", 1 mm, 1/64"	NB60DS6EM	49.45	35.60
100 mm	1 mm, 0.5 mm both sides	NB60DS100FM	36.61	26.60
150 mm	1 mm, 0.5 mm both sides	NB60DS150FM	49.45	35.60

4558

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	18.76	12.95
1/2"	3/4"	PC24TSG2P12	18.76	12.95
3/4"	1 1/4"	PC24TSG3P12	18.76	12.95
1 1/4"	2 1/8"	PC24TSG4P12	25.08	17.00
2 1/8"	3 1/2"	PC24TSG5P12	25.06	17.00
3 1/2"	6"	PC24TSG6P12	25.04	17.00

4368

PRO-CHECK PREMIUM Electronic Digital Internal Bore Gages

- IP54 water and dust protective rating
- Resolution: 0.00005" / 0.001mm
- Carbide measuring surfaces
- Contact points are designed to allow measurements near the bottom of blind holes
- Setting ring included
- Compatible with 3 Procheck data output options: USB or Bluetooth wireless and hardwire connect (Not included)
- Friction thimble
- Completed with protective case
- Wrench included
- Complete in molded case
- 1 Year Warranty



Minimum Measurement	Maximum Measurement	Order No.	Regular Price	SALE
6 mm	8 mm	PC20EIBG68MI5	1013.90	700.70
8 mm	10 mm	PC20EIBG810MI5	967.65	668.80
10 mm	12 mm	PC20EIBG1012MI5	967.65	668.80
12 mm	16.51 mm	PC20EIBG1216MI5	849.65	587.40
16.5 mm	20.32 mm	PC20EIBG1620MI5	849.65	587.40
20.32 mm	25.40 mm	PC20EIBG2025MI5	849.65	587.40
25.4 mm	30.48 mm	PC20EIBG2530MI5	849.65	587.40
30.48 mm	40.64 mm	PC20EIBG3040MI5	920.46	636.20
40.64 mm	50.80 mm	PC20EIBG4050MI5	1038.46	717.70

4580

STANLEY Standard Tape Measures

- Polymer coating for long life
- Corrosion resistant hook
- 1" Wide blades feature hook that moves to allow inside and outside measure
- Forward blade lock
- Hi-visibility yellow, high-impact plastic
- Blade returns automatically once blade lock is released
- 1" Wide blades have 7" stand out



Model No	Blade Length	Blade Width	Graduation	Order No.	Regular Price	SALE
30-454	25'	1"	1/16", 1/8"	KP441510	18.00	14.70
30-455	25'	1"	1/16"	KP442200	18.00	13.70
30-464	30'	1"	1/16"	KP442205	21.25	16.20
30-456	26'	1"	1/32", 1/16", 1mm	KP442210	18.00	13.70
30-485	12'	1/2"	1/32", 1/16"	KP442215	9.88	7.55
30-495	16'	3/4"	1/32", 1/16"	KP442220	13.13	10.00
30-496	16'	3/4"	1/32", 1/16", 1mm	KP442225	13.13	10.00

4926

Starrett Angle Meter

- Large scale for reading
- Pitch/angle calculator finds rise, run, angle, pitch information on back of tool



Order No.	Regular Price	SALE
MV8036080	35.98	30.90

4981

Starrett 567 Series Telescoping Gage Sets

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



Number of Pieces	Minimum Measurement	Maximum Measurement	Order No.	Regular Price	SALE
4	5/16" / 8.0 mm	2 1/8" / 54.0 mm	MV7052616	276.00	256.64
6	5/16" / 8.0 mm	6" / 150.0 mm	MV7052617	470.00	435.07

5150

MEASURING TOOLS

PRC CHECK Refractometers

- Lightweight aluminum construction
- Ergonomic, comfortable & easy operation
- Anti-slip, rugged body with durable & hygienic grip
- Translucent viewing colored background
- Hard plastic portable carrying case with sampler included
- Comfortable eyepiece for easy viewing
- Available in 0-10 & 0-32 Brix scale
- Lifetime warranty against manufacturer defects
- Features auto temperature compensation (ATC) for shops with varying temperatures



Brix Scale	Order No.	Regular Price	SALE
0-10%	NZ6040000	120.77	72.00

8522

PRC CHECK Loupe Magnifiers with LED & UV Light

- Metal frame body
- Distortion free lenses
- LED and UV lighted lens
- 20X lenses
- Leather case included
- 1 Year Warranty



Magnification	Order No.	Regular Price	SALE
20X	PC22L20XLUV	80.60	56.60
10X	PC22PC22L10XLUV	70.77	49.80

4662

PRC CHECK 12" Combination Square Sets

Sets consist of:

- 2 Pc. set: 12" blade, square head only
- 3 Pc. set: 12" blade, square head and center head
- 4 Pc. set: 12" blade, square head, center head and protractor head
- All sets supplied with 12" combination square blade, graduated in 8ths, 16ths, 32nds and 64ths



Number of Pieces	Order No.	Regular Price	SALE
2	NB60CS122	39.09	30.10
3	NB60CS123	49.27	37.70
4	NB60CS124	89.91	68.00

4367

PRC CHECK Screw Pitch Gages



Number of Leaves	Pitch Range	Order No.	Regular Price	SALE
30	4"-40"	NE60SP30	7.42	5.95
51	4"-84"	NE60SP51	21.78	15.00

4796

PRC CHECK Electronic Z Indicator

- Axial Preset Gage
- Red lamp with light up when touched
- Use vertical or horizontally
- 13.5mm Magnet Base diameter
- .56mm Probe Face diameter



Order No.	Regular Price	SALE
PC20EZAP2M	370.68	226.00

30243

Fowler X-TEST Test Indicators

Twice the range of most indicators!
Now available in HORIZONTAL & VERTICAL!

- .060" Range
- Dial reading: 0-15-0
- Jeweled movement
- Revolution counter
- East-to-read tilted dial
- Automatic reversal
- Swivel arc: 210°
- .080" Tungsten carbide point
- Includes two dovetail stems
- Furnished in molded case



		Horizontal			Vertical		
Graduation	Dial Face Diameter	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
0.0005"	1.0"	NA5552562002	200.53	170.75	-	-	-
0.0005"	1 1/2"	NA5552562001	200.61	170.79	NA5552562004	220.59	188.93

3770

Mitutoyo "Quik-Set" Test Indicators with Dovetail Mount

Set includes: (1).078" dia. carbide point installed, (1) stem - 3/8" dia. (8mm dia. for metric indicators) plus clamp with dovetail, holding bar and .039" and .118" steel ball contact point. Supplied with fitted plastic case.



- Jeweled bearings
- Automatic reverse

Dial Color	Range per Revolution	Graduation	Dial Reading	Order No.	Regular Price	SALE
White	0.008"	0.0001"	0-4-0	MT80513-403-10T	335.89	247.30
White	0.030"	0.0005"	0-15-0	MT80513-402-10T	261.24	192.37
White	0.030"	0.0005"	0-15-0	MT80513-412-10T	364.59	268.34
Yellow	0.2mm	0.002 mm	0-100-0	MT80513-405-10T	324.40	238.72

4202

Mitutoyo Radius Gage Sets

- Gages are stainless steel with no-glare satin finish
- Each gage is marked and have five different gaging surfaces for convex and concave radii
- All sets furnished in protective case



Number of Pieces	Minimum Radius	Maximum Radius	Order No.	Regular Price	SALE
25	1/64"	1/2"	MT80186-901	274.16	240.40
26	0.010"	0.500"	MT80186-906	277.03	241.40

4205

GENERAL Digital Stop Watch

- Normal time shows: hour, minute, second, AM/PM indicator, month, date, day
- 12/24 Hour user selectable
- 1/100 Second chronograph
- 8 Recallable lap memories
- Count-down timer with one second ews



Order No.	Regular Price	SALE
NB49SW269	27.22	23.50

3843

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	26.05	17.00
25 mm	50 mm	75 mm	NM52E25M	43.86	28.00
2"	4"	6"	NM52PR246	262.37	161.00

Tri Block Set					
Overall Width	Overall Length	Overall Height	Order No.	Regular Price	SALE
1"	2"	3"	NM52PR123	59.82	36.90

4371

PRO-CHECK Ultra Thin Style Steel Parallels

- 20 Pair set
- Hardened to 50RC
- Parallelism .0001"
- Height .001" accuracy
- Includes fitted case
- 1/32" Thick
- Range of sizes include 1/2" thru 1-11/16" in 1/16" increments



Order No.	Regular Price	SALE
NM55UTPS20	101.64	90.00

4849

PRO-CHECK 1/4" Precision Parallel Set

- 9 Pairs - 1/4" thick, 6" long
- 2 Pc. Each: 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-5/8 & 1-3/4"
- Accuracy ±.0002
- Made of high grade tool steel
- Hardened and precision ground



Order No.	Regular Price	SALE
NM55TPS9	182.63	100.00

4351

Fowler Magnetic Base Micrometer Stand

- Holds standard 0 - 12" micrometers firmly to metal surfaces
- V-bottom for mounting on cylindrical surfaces
- On/off magnet switch
- Blue enamel finish
- Base is 2.30" L x 1.20" W x 3.50" H
- Micrometer NOT included



Order No.	Regular Price	SALE
NA5552247010	103.82	98.96

3673

WORLD CLASS QUALITY Quick Quill Stop

- Fast On-Off clip action
- Easy and rapid quill depth setting
- Rigid and positive clamping
- Increase productivity - reduce cost
- Fits all Bridgeport type mills or any 1/2-20 stop rod



Order No.	Regular Price	SALE
NE60QS1	17.78	12.45

6343

INOGA Flex Dial Gage Holders

- Five axis holder
- Powerful magnetic base
- Fine adjustment
- Central locking mechanism with spring loaded bearing
- 2.2 x 2.0 Arm dimension



Pull Force	Stem Hole	Description	Order No.	Regular Price	SALE
61 lbf	3/8"	Always-On Flex Dial Gage Holder with 360 Degree Fine Adj at Base	FN60NF1033	186.64	151.50
70 lbf	3/8"	Flex Dial Gage Holder with 360 Degree Fine Adj at Base	FN60NF1024	189.94	154.20
70 lbf	3/8"	Power On/Off Flex Holder with Fine Adjustment at Base-Standard Arm	FN60NF10433	164.41	133.50
70 lbf	3/8", 6 mm, or 8 mm	Flex Dial Gage Holder with Fine Adjustment on Top Clamp	FN60NF61003	151.11	122.70

28627

Starrett Magnetic Bases

657 Series

Fixed Post Indicator Holder Features:

- Large 1-15/16 x 1-5/8 x 1-7/8" base
- 3 Precision ground magnetic contact surfaces
- V-Step holds base to arbors, shafts & chucks
- Push button on/off switch



Flex-O-Post Indicator Holder

- All features above plus flex arm for difficult positioning

Model No	Order No.	Regular Price	SALE
657AA	MV7052743	341.00	316.75
657T	MV7052760	481.00	444.38

5083

Starrett Edge Finders

827 Series

- Edge finders accurately locate working edges, shoulders, grooves, center points and scribed lines
- Hardened and centerless ground to precision tolerances



Style	Shank	Tip Diameter	End Type	Order No.	Regular Price	SALE
Edge	3/8"	0.200"	Single End	MV7053062	48.00	47.91
Edge/Center	1/2"	0.200" x Point	Double End	MV7053063	59.00	58.10
Edge	10 mm	6 mm	Single End	MV7056041	49.00	48.90

5028

Starrett 5 Pc. Wiggler Set

5828HZ Model

- Furnished with offset indicator holder and new chuck design to hold all attachments
- Four attachments adapt the tool to countless applications and are snapped in chuck without removing collet nut
- Using offset indicator holder D, the mechanic can sweep holes or OD' s for checking run-out or concentricity, establish center distances, check straightness or alignment of flat surfaces
- With point A, working centers can be accurately located



Order No.	Regular Price	SALE
MV7053064	114.00	108.62

5164

MEASURING TOOLS

Starrett® 91 Series Straight Tap Wrenches

- Made of rugged steel
- Well proportioned and easy to handle
- Properly tempered gripping surfaces will firmly hold square or round shanks
- The plunger, operated by the knurled sleeve, backs off the instant pressure is removed from the sleeve



Size	Right Hand Thread Length	Order No.	Regular Price	SALE
1/16" to 1/4"	6"	MV7050419	91.00	87.31
3/16" to 1/2"	9"	MV7050420	130.00	123.32
1/4" to 5/8"	12"	MV7050421	211.00	197.33
5/16" to 3/4"	16"	MV7050422	286.00	265.84

25070

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	42.00	41.60
0.025"-0.075"	Single End	MV7051137	51.00	50.71
0.045"-0.135"	Single End	MV7051138	57.00	55.81
0.110"-0.200"	Single End	MV7051139	61.00	59.91
0.010"-0.200"	4 piece set in Protective Case	MV7051140	215.00	201.13

5088

GENERAL 5 Pc. Center Punch Set

- Points are ground to size for maximum strength and penetration
- Stamped with size for quick identification
- Knurled body



Order No.	Regular Price	SALE
NE50SPC74	31.53	25.00

6647

KLEIN TOOLS® Digital Pocket Thermometer



- User selectable Fahrenheit and Celsius temperature measurements
- Range -40 to 482-degrees F (-40 to 250-degrees C) with 0.1 degree resolution
- Backlit display for easy viewing in low light
- Max/Min, Hold and Average functions
- Not a medical device; thermometer is NOT intended for use on people or animals.
- Auto-power off after 15 minutes conserves battery life
- 3-Inch stainless steel probe with protective sheath that also acts as a handle
- Lightweight, compact tool with pocket clip provides easy storage and quick access

ManufacturerNo	Order No.	Regular Price	SALE
ET05	KP6016215	37.19	33.50

30005

KLEIN TOOLS® 24" Torpedo Level



- Level's adjustable vial allows angle transfer between multiple surfaces
- Patented magnet track keeps powerful rare earth magnets in place
- Top V-Groove fits contour of conduit and pipe
- High visibility vials with reinforced housing
- Durable rubberized end caps increase drop protection at 9.9-Foot (3 m)
- Vial accuracy is +/- 0.029°
- Rubber grip handle for easy transportation and use
- Orange body for visibility so it won't get lost on conduit
- Protrusions on rubber end caps help prevent movement while on walls
- Hang holes on each end for easy storage

Model No	Order No.	Regular Price	SALE
935L	KP6016170	114.42	103.00

29999

KLEIN TOOLS® Lighted Torpedo Billet Level

Rare Earth Magnet



- Level's large, bright LED high-definition vials are easy to read in any lighting condition
- Patented magnet track prevents powerful Rare Earth magnets from falling out
- Large, easy-to-read high-visibility vials at 3 angles: level, 90, and 45 degrees
- Large top-view vial windows enable easy readability from multiple angles
- High-visibility orange professional-grade billet aluminum body is easy to see on conduit and at jobsite
- 3-minute auto shut-off saves battery life
- V-Groove fits contour of conduit and pipe
- Tapered nose easily pushes into pockets
- Water and impact resistant

Model No	Order No.	Regular Price	SALE
935RBLT	KP6016180	88.41	79.60

30010

KLEIN TOOLS® 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	59.02	52.54

30017

KLEIN TOOLS® Fiberglass Folding Rule



- Black markings on yellow, with red stud center markings every 16-Inches
- Measurements are marked on both sides and both edges, graduated to 1/16-Inch
- Engraved graduations on both sides
- Constructed of tough nylon, reinforced with glass fibers for added durability, and resistance to weather, abrasion, and most chemicals
- Positive locking joints and stainless steel spring hinges for added strength

ManufacturerNo	Order No.	Regular Price	SALE
910-6	KP6016190	49.77	44.80

30007

ProFlex® Back Supports & Gel Foam Knee Pad

ProFlex® 100 Economy Back Support

- Durable 280D spandex
- Rubber-tracked webbing
- Adjustable two-stage closure
- Adjustable 1-1/4" knit elastic suspenders are detachable

ProFlex® 350 Gel 2 Pc. Kneepad

- 12mm NBR gel padding
- Cut-resistant, abrasion-resistant and non-marring rubber composite pad
- Slip-resistant durable nylon-rubber
- 1680D ballistic nylon outer shell
- Breathable neoprene stretch strap
- **One size fits all**



Back Support



Knee Pads

Back Support			
Size	Order No.	Regular Price	SALE
Medium	LF65100M	45.25	40.70
Large	LF65100L	45.25	40.70
X-Large	LF65100XL	45.25	40.70
2X-Large	LF65100XXL	45.25	40.70

Knee Pads			
Size	Order No.	Regular Price	SALE
One Size	LF65350	82.33	73.10

23179

bolle Disposable Face Screen

- Ready-to-use packaging
- Anti-Fog & Blue Protective Coating
- Adapted to Prescription Glasses
- Protection against Blood and Body Fluids
- Elastic Headband white Polyester
- Frame: Antibacterial PU
- XL Viewing Visor 8-5/8 x 13" PET/PC -0.3mm
- Priced each sold in min. 10 pcs.



Height	Width	Thickness	Head Gear Material	Color	Order No.	Regular Price	SALE
12"	18"	0.3 mm	Polyethylene	Clear	BO15DFS2	19.32	17.25

PRICE PER EACH MASK

29584

bolle IRI-s With Dioptric Corrective Lenses

- Universal safety spectacle that is modular and infinitely adaptable to every individual thanks to the B-flex shape memory bridge
- Pivoting, non slip & ergonomic temples
- Clear version with reading area
- PLATINUM® anti-fog/anti-scratch coating



Magnification	Frame Color	Lens Color	Order No.	Regular Price	SALE
1.5x	Black & Red	Clear	BO1540187	27.05	19.98
2.0x	Black & Red	Clear	BO1540188	27.30	19.88
2.5x	Black & Red	Clear	BO1540189	27.05	19.00
3.0x	Black & Red	Clear	BO1540190	27.05	19.00

2500

bolle RUSH+

- Upper protection
- Non-slip adjustable bridge
- PLATINUM® anti-scratch/anti-fog coating
- Co-injected ultra-flexible temples
- Bi-colored temples



Lens Color	Frame Color	Order No.	Regular Price	SALE
Smoke	Black & Grey	BO1540208	24.16	18.91
Brown	Black & Grey	BO1540209	24.84	19.84
Twilight	Black & Grey	BO1540225	24.16	18.91
Clear	Yellow & Black	BO1540243	24.16	18.91
Smoke	Yellow & Black	BO1540244	24.16	18.91
Brown	Yellow & Black	BO1540245	24.84	19.84
Clear	Blue & Green	BO1540256	26.69	19.87
Smoke	Blue & Green	BO1540257	24.16	18.91
Clear	Black & Phosphorus Green	BO1540292	26.22	19.64
Brown	Grey	BO1540294	24.84	18.74
Clear	Black & Red	BO1541080	26.69	19.34

2506

Honeywell UVEX Hypershock™

- Delivers the ultimate combination of high-performance protection and aggressive sport inspired styling
- The full frame design offers high impact protection, with streamlined padded temples and a molded nosepiece for a secure, comfortable fit



Lens Color	Lens Coating	Frame Color	Order No.	Regular Price	SALE
Gray	Anti-Fog	Black	LF50S2941XP	23.52	18.80
Reflect 50	Scratch Resistant	Matte Black	LF50S2943	25.70	20.80
Blue Mirror	Scratch Resistant	Matte Black	LF50S2945	25.70	20.80
Espresso	Polarized	Matte Black	LF50S2949	92.00	69.80

2691

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

- Lightweight, rimless design provides all day user comfort
- Flexible, rubber tip temples provide a secure fit without uncomfortable pressure points
- Molded nose bridge design to fit the vast majority of users
- Variety of lenses available to fit your application
- Meets ANSI Z87.1+ | Meets CSA Z94.3



Lens Color	Lens Coating	Frame Color	Order No.	Regular Price	SALE
Clear	Anti-Scratch	Clear	PP1017725	2.60	2.40
Clear	Anti-Scratch / Anti-Fog	Clear	PP1017745	3.28	3.00
Clear	Anti-Scratch	Black	PP1018430	6.37	6.25
Gray	Anti-Scratch	Black	PP1018435	6.37	6.25
I/O Mirror	Anti-Scratch	Black	PP1018440	7.09	6.95
Light Blue	Anti-Scratch	Black	PP1018445	6.37	6.25
Silver	Anti-Scratch	Black	PP1018450	7.09	6.95
Amber	Anti-Scratch	Black	PP1018455	6.70	6.55
Clear	Anti-Scratch / Anti-Fog	Black	PP1018460	7.49	7.35
Gray	Anti-Scratch / Anti-Fog	Black	PP1018465	7.49	7.30

29287

PYRAMEX Lens Cleaning

Towelettes
For plastic, glass and polycarbonate lenses

- Anti-fog, anti-static formula
- Perfect for safety goggles and glasses
- 100 Individually packaged towelettes



KB54LCT100

KB54LCS20

Lens Cleaning Station

- Includes 16oz. bottle, anti-fog/static cleaning solution and 1200 tissues
- Can be attached to a wall

Type	Order No.	Regular Price	SALE
Lens Cleaning Towelettes	KB54LCT100	15.99	13.60
Lens Cleaning Station	KB54LCS20	33.43	28.40

30901

PRM PRO Hardwearing Workers

- Heavy-duty side split leather palm
- 2-1/2" Rubberized safety cuff, wing thumb, gunn pattern
- Canvas back with leather knuckle strap



Size	Order No.	Regular Price	SALE
Large	KB38100L	10.02	9.15
Medium	KB38100M	10.02	9.15
X-Large	KB38100XL	10.02	9.15

30760

BAUSCH + LOMB Pre-Moistened Lens Cleaning Tissues

- Non-silicone based, anti-fog, anti-static, individually packaged tissues treated with special surfactants clean all glass and plastic lenses
- 100 Tissues per box



Order No.	Regular Price	SALE
KA408574GM	22.92	21.50

22761

PLANT & SAFETY

Endura® Built tough leather gloves W/ high-viz cuffs

- Retroreflective silver strips for enhanced visibility
- 6" gauntlet cuff that features retroreflective silver strips
- Excellent water, oil, and stain-repellent properties
- Performance thumb and palm patch for extra durability
- Made with selected heavyweight 3½ oz. horsehide leather that's comfortable yet durable
- Made with para-aramid fiber thread for added seam integrity



30807

Wells Lamont Industrial 70062 Thermal Leather Driver

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



Size	Order No.	Regular Price	SALE
Small	LW0110515	14.41	10.95
Medium	LW0110520	14.41	10.95
Large	LW0110525	14.41	10.95
X-Large	LW0110530	15.40	11.95

30891

Baseball Style Bump Cap with HDPE Protective Liner and Adjustable Back

- Ultra sleek design means the HardCap A1+™ is almost indistinguishable from a low-profile baseball cap
- The protective HDPE liner is removable, so the outer cap is fully washable with a plastic brim
- Unique size adjuster slides on an elastic strip to give a quick, secure fit. Angled downward to fit under nape of neck
- Terry cloth sweatband adds comfort and absorption for the wearer
- Holes in the liner match up with two mesh panels on the cap to provide added ventilation for coolness and comfort



Color	Order No.	Regular Price	SALE
Black	PP1032145	49.55	37.40
Black/Orange	PP1032155	49.55	37.20
Navy	PP1032160	49.55	37.20
Blue/Yellow	PP1032165	49.55	37.20
Gray/Red	PP1032170	49.55	37.20
Camo	PP1032175	62.35	45.60
High Visibility Yellow	PP1032180	62.35	46.20
Hi Viz Orange	PP1032185	62.35	46.20
Black/Gray	PP1032150	49.55	37.20

29806

Honeywell Sync Stereo Earmuff

- Use as passive hearing protector or as stereo earmuffs
- No volume knobs or power switches to coordinate nor batteries to relace
- Ease-of-use is enhanced by maintaining volume and power control through the external device
- Can be used with MP3 players, mobile phones, and other personal listening devices
- Simply plug in device and listen



Noise Reduction Rating	Order No.	Regular Price	SALE
25 dB	LF501030110	231.77	190.45

† While supplies last

23321

36

3M 500 Pairs One Touch Disposable Earplug Refill with 33 dB Earplugs

- OUTSTANDING COMFORT: E-A-Rsoft ear plugs have an advanced foam with a smooth texture - offering in-ear comfort for wearing over an extended time.
- SOFT SOUND-ABSORBING FOAM: Soft foam earplugs are easy to roll down and insert, then expand within the ear canal to help reduce noise exposure.
- VERSATILE: Use while chipping, chiseling, drilling, furnace operations, grinding, heavy equipment operations, machining, pouring/casting, power fastening, riveting, sanding, sawing and welding.
- DESIGNED FOR 3M ONE TOUCH DISPENSER: Dispenser delivers one uncorded foam ear plug with a gentle turn.



Color	Style	Order No.	Regular Price	SALE
Yellow	Disposable / Foam	KB3591004	0.20	0.18

500 earplugs - price per each plug

23128

3M 3M™ Skull Screws™ Earplugs P1310

- Polyurethane
- Tough look of threaded metal, but feel of soft foam
- Push-to-fit style prevents earplug roll down
- Foam tip stays clean
- NRR 32 dB



Noise Reduction Rating	Style	Order No.	Regular Price	SALE
32 dB	Corded	KB3592952	1.35	1.26

Sold in Box Only

22585

Honeywell Laser Lite® Disposable Foam Earplugs

- Vibrant colors make protection visible
- Smooth, soil-resistant closed-cell foam skin prevents dirt build-up
- Contoured T-shape for easy insertion and wear
- Self-adjusting foam expands to fit virtually every wearer
- Compliance: ANSI S3.19-1974
- Uncorded and corded
- NRR: 32 dB



LF50LL30



LF50LL1D



LF50LL1

Style	Standard Pack	Order No.	Regular Price	SALE
Uncorded	200	LF50LL1	0.28	0.27
Reusable / Uncorded	500	LF50LL1D	0.31	0.27
Corded	100	LF50LL30	0.55	0.50

Price per each

23322

Disposal Medical 3-Ply Face Mask

- Comfortable and breathable, soft & skin friendly
- Plane ear hook
- Size 6.88 inch x 3.75 inch
- Includes adjustable nose bridge strip
- Bacterial filtration rate ≥ 95%
- FDA approved medical
- 50 per box, priced each



Order No.	Regular Price	SALE
MA2650000	1.38	0.90

PRICE PER EACH MASK

29357

GloWear® 8010HL Non-Reflective Vests

- Hook & loop closure
- Polyester mesh (4 oz.)
- One size fits all



Color	Order No.	Regular Price	SALE
Lime	LF658010HLL	6.61	4.95
Orange	LF658010HLO	6.61	4.95

2601

Kut Guard® Double-Ply Kevlar® Sleeve

- Kevlar provides excellent cut protection and heat resistance for the wrists and arms
- Seamless knit for comfort and flexibility



Size	Order No.	Regular Price	SALE
10"	PP1010390	6.73	4.95
12"	PP1010405	7.18	5.95
14"	PP1010425	8.21	5.95
18"	PP1010465	9.14	6.95
24"	PP1010505	14.12	9.95

29836

PRECISION BRAND Blue Tempered Shim Stock

- Branded® Shim from Precision Brand allows you to immediately identify your shim stock with precision accuracy.
- Thickness, width and tracking number clearly marked on shim
 - Stock is high carbon 1095 hardened and tempered spring steel



Roll					
Width	Length	Thickness	Order No.	Regular Price	SALE
3"	50"	0.002"	MA5223110	66.54	49.84
3"	50"	0.003"	MA5223120	69.84	52.82
5"	50"	0.004"	MA5223130	75.42	57.78
6"	50"	0.005"	MA5223145	86.54	49.84
6"	50"	0.006"	MA5223155	66.28	49.56
6"	50"	0.007"	MA5223165	67.58	50.76

Sheet					
Width	Length	Thickness	Order No.	Regular Price	SALE
6"	25"	0.008"	MA5223170	78.95	60.95
6"	25"	0.010"	MA5223180	86.07	67.36
6"	25"	0.012"	MA5223200	88.76	69.86
6"	25"	0.015"	MA5223220	96.51	76.78
6"	25"	0.020"	MA5223240	112.31	90.98
6"	25"	0.025"	MA5223260	128.39	105.45
6"	25"	0.032"	MA5223280	142.27	117.96

24410

PRECISION BRAND 20 Pc. Poc-Kit® Feeler Gage Assortment 5" Long Blades

- Packaged in a sturdy, vinyl case with individual blade pockets and folds flat for convenience
- Contains twenty 1/2" wide blades
- Each blade is clearly etched with thickness
- Ends are rounded and edges are smooth for safety
- Contains: .001"/.025mm, .0015"/.038mm, .002"/.051mm, .003"/.076mm, .004"/.102mm, .005"/.127mm, .006"/.152mm, .007"/.178mm, .008"/.203mm, .009"/.229mm, .010"/.254mm, .012"/.305mm, .014"/.356mm, .015"/.381mm, .016"/.406mm, .018"/.457mm, .020"/.508mm, .022"/.559mm, .024"/.610mm, .025"/.635mm



Order No.	Regular Price	SALE
MA5219740	98.05	62.00

1472

PRM PRO Tungsten Electrodes

- Complete line of Tungsten Electrodes available
- Priced per package of 10 pieces



Size	Pure			2% Ceriated			1.5% Lanthanated			E3		
	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
1/16"	WE101167G	26.96	21.00	WE101167GC2	29.63	23.00	WE101167GL	28.21	22.00	WE101167000	24.82	20.00
3/32"	WE103327G	53.49	40.00	WE103327GC2	5.92	4.89	WE103327GL	56.47	42.00	WE103327000	48.71	36.00
1/8"	WE10187G	91.09	66.00	WE10187GC2	100.50	72.00	WE10187GL	95.73	69.00	WE10187000	84.07	61.00

2910

LINCOLN ELECTRIC Leather Welding Waist Apron

- Length: 45"
- Adjustable neckstrap closure
- Helps to protect your clothes and skin from spattering
- Harness can be adjusted for a secure and comfortable fit
- Suitable for light welding



Size	Type	Color	Order No.	Regular Price	SALE
24" x 45"	Welding Apron	Brown	LE01KH804	55.88	50.30

29097

Honeywell Welding Helmets

- HW100:**
- Easy ratchet adjustment system for personalized fit
 - Replaceable, padded sweatband
 - Operating temperature range: +23°F to +131°F
- HW200:**
- Grind mode functionality that ensures the ADF will not darken when used during clean-up work
 - Sensitivity adjustment that gives the wearer the option to adjust the filter's sensitivity
 - Replaceable, padded sweatband
 - Operating temperature range: +14°F to +131°F



View Width	View Height	Lens Shade	Window Style	Color	Order No.	Regular Price	SALE
3.8"	1.7"	10	Fixed Front	Black	LF50HW100	297.27	219.18
3.8"	1.9"	9-13	Fixed Front	Black	LF50HW200	394.30	294.68

2701

TITAN Solar Powered Auto Dark Welding Helmets

- Durable, lightweight material is corrosion resistant and flame retardant
- Ultra high performance filters protect against UV and IR
- Returns to normal when welding stops w/ dark to clear adjustments available
- Special turnover headband mechanism allows for greater comfort and reduces fatigue
- Utilizes high performance solar cells with 2 built-in 3V lithium batteries as power back-up
- Viewing area: 3.86" x 2.17"



Window Style	Order No.	Regular Price	SALE
Auto Darkening	KP8241265	235.30	143.80
Auto Darkening	KP8241266	235.30	143.80
Auto Darkening	KP8241279	235.30	168.00
Fixed Front	KP8241283	235.30	143.80
Auto Darkening	KP8241288	235.30	143.80
Auto Darkening	KP8241289	235.30	143.80
Auto Darkening	KP8241290	235.30	143.80
Auto Darkening	KP8241295	235.30	143.80

25292

TITAN Auto Darkening Welding Helmet

- Durable, light weight nylon material
- Protects against UV and infrared radiation in variable shades from DIN9 to DIN1
- Lens automatically darkens when arc is struck and returns to normal when welding stops
- Powered by solar cells with battery back-up
- 3.85" x 1.70" Viewing area
- Switching time: Light to Dark 0.000033 seconds



Color	Order No.	Regular Price	SALE
Red	KP8241260	210.22	149.40

3180

PLANT & SAFETY

Kimberly-Clark Professional WYPALL X80 Towels

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



LM5505930



LM5541043



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	40.91	36.80
Brag Box	16.8"	12 1/2"	160	6.3 lbs	LM5541041	80.52	72.50
Jumbo Roll	13.4"	12 1/2"	475	14.0 lbs	LM5541043	177.02	159.30

2737

Tolco CleanCheck® 3 Pack - (32 oz. Trigger Sprayers and Bottles)

- Improves Safety. Pre-printed, bilingual (English/Spanish) content check boxes significantly improve identification
- Includes three Model 320 trigger sprayers that provide up to 40% greater output per stroke, significantly reducing the number of times you pull the trigger
- Always have the correct bottle available - one bottle, multiple applications
- Bottles are imprinted with ultraviolet ink for superior chemical resistance and a bright, glossy finish
- Sold per 3 Pack



Size	Material	Imprinting	Order No.	Regular Price	SALE
32 oz	Natural HDPE	White/Red	TO1010000	31.30	16.25

29260

Streamlight 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	42.73	37.84
Blue	KA5765022	42.73	37.84

25101

Weiler Industrial Scrub Brushes



LD5025262



LD5025263

Overall Length	Bristle Size	Bristle Material	Order No.	Regular Price	SALE
8"	2"	Tampico	LD5025262	8.11	5.00
20"	2"	Tampico	LD5025263	11.56	7.15

3213

Weiler Counter Dusters

- Tampico and synthetic dusters are 8" long with 2-1/2" fill in a wood block
- Orange duster is 9" long with 2-1/2" fill in a durable structural plastic block



Style	Bristle Size	Bristle Color	Overall Length	Order No.	Regular Price	SALE
General Purpose	2 1/2"	Black	8"	LD5325251	14.64	13.88
Oil Resistant Water Resistant Hand	2 1/2"	Black	8"	LD5325252	11.66	10.37
Oil Resistant Water Resistant	2 1/2"	Orange	9"	LD5342213	15.68	15.06

3210

Koehler BrightStar LED Lighthawk Gen II Lanterns

- Bulb:** LED
- Lumens:** 300 high / 125 low
- Batteries:** lithium ion-rechargeable
- Run time:** 7 hours high/ 14 hours low
- Beam distance:** 447M
- Size:** 9.5 x 3.12 x 5.12"
- Switch:** Toggle
- Intrinsically safe
- Features:** wall and vehicle mountable, dual mode main beam, super tough nylon construction, LED charge status indicator, non-slip rubber bottom and handle, low battery indicator, easily adjustable articulated head, quick release shoulder strap, dual mode-high visibility tail light, waterproof, floats, weighs just 1.9 pounds, limited lifetime warranty



Battery Size	Body Color	Order No.	Regular Price	SALE
Li battery, 4 Cell, AC Charger	Orange	KN0107610	412.09	370.90
Li battery, 4 Cell, AC & DC Chargers	Orange	KN0107610U	435.54	392.00
Li battery, 4 Cell, AC Charger	Black	KN0107611	412.09	370.90
Li battery, 4 Cell, AC & DC Chargers	Black	KN0107611U	435.54	392.00
Li battery, 4 Cell, AC Charger	Yellow	KN0107612	412.09	370.90
Li battery, 4 Cell, AC & DC Chargers	Yellow	KN0107612U	435.54	392.00
Li battery, 4 Cell, DC Charger	Orange	KN0107630	412.09	370.90
Li battery, 4 Cell, DC Charger	Black	KN0107631	412.09	370.90
Li battery, 4 Cell, DC Charger	Yellow	KN0107632	412.09	370.90
Li battery, 4 Cell, 220V AC Charger	Orange	KN0107650	412.09	370.90
Li battery, 4 Cell, 220V AC Charger	Black	KN0107651	412.09	370.90
Li battery, 4 Cell, 220V AC Charger	Yellow	KN0107652	412.09	370.90
Li battery, 4 Cell, Direct Wire	Orange	KN0107670	412.09	370.90
Li battery, 4 Cell, Direct Wire	Black	KN0107671	412.09	370.90
Li battery, 4 Cell, Direct Wire	Yellow	KN0107672	412.09	370.90

2743

Koehler BrightStar Worksafe LED Flashlights

- Bulb:** LED
- Lumens:** 15720: 60 lumens, 15460: 80 lumens
- Run Time:** 15720: 250 hrs., 15460: 200 hrs.
- Battery:** 15720: (3) D Alkaline, 15460: (2) D Alkaline
- Size:** 15720: 10.2 x 2.3", 15460: 8.1 x 2.3"
- Features:** For use in hazardous situations, intrinsically safe, waterproof, anti-roll tube



Lumens Range	Order No.	Regular Price	SALE
80/100	KN0115460	31.07	28.00
60	KN0115720	32.59	29.30

2750

DAZOR 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



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	113.18	111.90
2.5X	AAA	4	12 x 0.5W Hi Brightness LEDs	KC50JMJNI	100.75	100.70

2549

Legacy Blow Guns

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



LX55AG2



LX55AG7



LX55AG218

Tip Type	Order No.	Regular Price	SALE
Extension Reach	LX55AG2	32.88	28.40
Safety	LX55AG7	11.32	9.40

2239

Economy Shelf Bins

for 12", 18" Deep Shelving or Automated Storage & Retrieval Units

- Molded industrial grade polymers for years of service
- Special built-in hanglock allows easy access to the entire bin
- Wide label holder molded in
- Purolator dimensional weight shipping rates apply



Outside Length	Outside Width	Outside Height	Yellow			Red			Blue		
			Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
11 5/8"	2 3/4"	4"	SD5030110Y	5.35	2.75	SD5030110R	5.35	2.75	SD5030110B	5.35	2.75
11 5/8"	4 1/8"	4"	SD5030120Y	6.07	2.95	SD5030120R	6.07	2.95	SD5030120B	6.07	2.95
11 5/8"	6 5/8"	4"	SD5030130Y	9.29	4.95	SD5030130R	9.29	4.95	SD5030130B	9.29	4.95
17 7/8"	6 5/8"	4"	SD5030138Y	11.56	5.95	SD5030138R	11.56	5.95	SD5030138B	11.56	5.95
17 7/8"	8 3/8"	4"	SD5030158Y	15.81	7.95	SD5030158R	15.81	7.95	SD5030158B	15.81	7.95

22707

LiftAll Tuff Edge® Polyester Web Slings

- Abrasion and cut resistant blue polymer edges
- Silver body yarn treatment to resist abrasion
- Proven sling web construction with red core warning yarns
- Tuff-Tag provides legible identification for the life of the sling
- 2-Ply material



Type 3, Web Sling



Type 4, Web Sling

Type 3, Web Sling												
Width	Length - 10 feet			Length - 12 feet			Length - 8 feet			Length - 6 feet		
	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
1"	SE82EE2801T10	60.68	49.09	SE82EE2801T12	69.06	55.73	SE82EE2801T8	52.30	42.45	-	-	-
2"	SE82EE2802T10	98.33	78.97	SE82EE2802T12	113.48	90.94	SE82EE2802T8	83.13	66.88	-	-	-
3"	SE82EE2803T10	156.53	125.15	SE82EE2803T12	181.09	144.57	SE82EE2803T8	131.96	105.63	SE82EE2803T6	107.43	86.22
4"	SE82EE2804T10	208.28	166.21	SE82EE2804T12	240.09	191.35	SE82EE2804T8	176.48	140.95	SE82EE2804T6	144.67	115.70

Type 4, Web Sling															
Width	Length - 10 feet			Length - 3 feet			Length - 4 feet			Length - 6 feet			Length - 8 feet		
	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"	SE83EE2801T10	60.68	49.09	SE83EE2801T3	31.32	25.85	SE83EE2801T4	35.51	29.16	SE83EE2801T6	43.90	35.81	SE83EE2801T8	52.30	42.45
2"	SE83EE2802T10	98.33	78.97	SE83EE2802T3	45.18	36.81	SE83EE2802T4	52.78	42.84	SE83EE2802T6	67.96	54.92	SE83EE2802T8	83.13	66.88

23706

KANSEN Socket Trays

Trays designed to help you work faster

- Sizes are marked on posts for instant identification
- Tough ABS plastic resists gas, oil and abuse
- Edge tangs for easy handling



Red, Imperial				
Drive	Socket Size	Order No.	Regular Price	SALE
1/2"	3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1", 1 1/16", 1 1/8", 1 1/4"	RX801201	19.44	16.38
1/4"	1/8", 5/32", 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2", 9/16", 5/8"	RX801401	17.98	17.76
3/8"	1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1"	RX803801	17.98	17.76

Gray, Metric				
Drive	Socket Size	Order No.	Regular Price	SALE
1/2"	10 mm, 11 mm, 12 mm, 13 mm, 14 mm, 15 mm, 16 mm, 17 mm, 18 mm, 19 mm, 20 mm, 21 mm, 22 mm, 23 mm, 24 mm, 25 mm, 27 mm	RX801202	19.44	19.38
1/4"	4 mm, 4.5 mm, 5 mm, 5.5 mm, 6 mm, 7 mm, 8 mm, 9 mm, 10 mm, 11 mm, 12 mm, 13 mm, 14 mm, 15 mm	RX801402	17.98	17.76
3/8"	6 mm, 7 mm, 8 mm, 9 mm, 10 mm, 11 mm, 12 mm, 13 mm, 14 mm, 15 mm, 16 mm, 17 mm, 18 mm, 19 mm, 20 mm	RX803802	17.98	17.76

5344

PRM PRO Adjustable Shop Stool with Backrest

- Matte black powder coat finish
- Padded 14" vinyl seat features a backrest for comfort
- Backrest adjusts and can be removed when desired
- Stool rotates 360°
- Seat height adjusts from 29" to 33" easily with just one hand
- Load capacity 300 lbs
- Limited lifetime warranty against manufacturer defects
- Ships Purolator



Height	Order No.	Regular Price	SALE
38"-43"	RZ457000	166.16	104.40

Save while supplies last

5465

PRM PRO Swivel Tractor Seat

- Air cylinder for easy height adjustment
- Five 3-1/2" heavy duty, chrome finished casters with rubber tread for ease of mobility
- Large, reinforced 17" diameter 1" deep tool tray
- Seat width 16"
- Limited lifetime warranty
- Ships Purolator



Height	Order No.	Regular Price	SALE
18"-22"	RZ454000	235.84	168.00

5484

PRM PRO Roller Shop Stool

With Side Drawers

- Two side drawers that will not interfere with the user's legs
- Front tray
- Tool bracket for easy access to your tools*
- Back seat handle, 2-1/2" casters
- Maximum loading capacity: 330 lbs.
- 3" Cushioned seat for user's comfort
- Hook holes on backside for "S" hooks
- Limited lifetime warranty



Order No.	Regular Price	SALE
RZ455500	120.60	76.30

*Tools not included, Ships via Purolator

5478

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	49.11	37.00
24"	9"	12"	LC707699	54.74	41.00

5487

WORKHOLDING

KLEIN TOOLS 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	Wattage	Color	ManufacturerNo	Order No.	Regular Price	SALE
Wireless	5 W	Orange, Black, Gray	AEPJS1	KP6040000	82.70	62.00

28842

KLEIN TOOLS Tradesman Pro™ Tool Master Rolling Tool Bag

- Rugged 8-Inch (203.2 mm) wheels provide high clearance to easily roll over rough terrain
- Hard top allows for stacking materials on top
- Load tested up to 250-Pounds (113 kg)
- Twist-lock Klein LED Light (55437) or Wireless Speaker (AEPJS1) on front mount (items sold separately)
- Heavy-duty telescoping handle
- Exterior webbing and D-rings allow for bungee cord attachment and other add-ons
- Metal latches keep lid closed
- Double lock hasp on hard top
- Water Resistant
- Total of 19 interior and exterior pockets for maximum tool storage



Number of Pockets	Length	Width	ManufacturerNo	Order No.	Regular Price	SALE
19	21-51/64"	15-13/32"	55473RTB	KP6013135	538.89	385.90

28981

KLEIN TOOLS Tradesman Pro™ Backpack

- 39 different-sized pockets for tools, parts and gear
- Reflective shoulder straps with extra padding and handle
- Tall interior pockets for long screwdrivers
- Upper pockets holds safety glasses, cell phones, etc
- Zipper pocket for small parts and tools
- Exterior tape thong and tape measure holder
- Fully-molded bottom protects from the elements



Number of Pockets	Width	Length	Height	Color	ManufacturerNo	Order No.	Regular Price	SALE
39	7"	14 1/2"	20"	Black, Reflective Gray, Green Accents	55597	KP6012785	269.43	199.00
39	7"	14 1/2"	20"	Camo	55421BP-14CAMO	KP6012910	246.10	182.00

28930

KESSEY 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	SG755Q12	146.63	129.99
20"	4 3/4"	2,660 lbs	SG755Q20	210.11	186.26
6"	4 3/4"	1330 lbs	SG755Q4	71.02	62.98
8"	4 3/4"	2,660 lbs	SG755Q8	124.85	110.61

22787

KANTWIST T-Handle Clamps

- Lightweight and 40% stronger than c-clamps
- Floating jaws stay parallel & eliminate distorting or twisting action
- Cantilever action provides 4:1 ratio
- Built in "V" blocks for holding round or rod stick
- Copper plated jaws and screws, ideal for welding

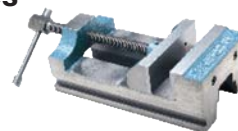


Maximum Opening Capacity	Open Throat Depth	Closed Throat Depth	Load Capacity	Order No.	Regular Price	SALE
1"	3/8"	1/2"	350 lbs	SE64401	31.11	24.00
2"	1 1/8"	1 1/4"	800 lbs	SE64405	43.93	33.00
2 1/2"	2"	1 13/16"	700 lbs	SE64407	44.90	34.00
3"	1 1/4"	1 3/4"	1500 lbs	SE64410	70.10	53.00
4 1/2"	2 1/4"	3 13/16"	1700 lbs	SE64415	74.88	57.00
6"	2 1/8"	3 3/8"	2000 lbs	SE64420	92.34	70.00
6"	4 1/2"	5 1/2"	2000 lbs	SE64421	109.43	83.00
9"	3 3/8"	5 1/4"	2500 lbs	SE64430	191.95	144.00
10"	6"	7"	3500 lbs	SE64435	295.94	222.00
12"	12"	7"	6000 lbs	SE64440	317.89	239.00

23592

FALMGREN INC Drill Press Vises

- Replaceable Steel Jaws
- Made from 30,000 PSI tensile strength, fine grain cast iron
- Base and bed parallel to 0.001 in
- Center of base is open
- All vises can be mounted on the base, either side or placed on end for general use
- Lifetime Warranty



Jaw Height	Jaw Width	Jaw Depth	Jaw Opening Capacity	Throat Depth	Order No.	Regular Price	SALE
1"	1 1/2"	1"	1 1/2"	1"	JB506	152.45	130.00
1 1/2"	2 7/16"	1 1/2"	2 1/2"	1 1/2"	JB5030	191.20	165.00
1 1/2"	2 7/16"	1 1/2"	3"	1 1/2"	JB5010	208.13	176.90
1 3/4"	3"	1 3/4"	3"	1 3/4"	JB5013	358.85	305.00
1 3/4"	4"	1 3/4"	4"	2"	JB5014	449.28	381.90
2"	6"	2"	6"	2"	JB5016	891.39	757.70

24369

RAPIDHOLD™ 4" & 6" Drill Press Vise

- Versatile vises machined on four sides
- May be used on base, either side or end
- Made of high grade gray iron and are precision ground
- Ground steel jaw plates are removable



Model No	Jaw Opening Capacity	Jaw Width	Jaw Depth	Weight	Order No.	Regular Price	SALE
7406	4"	4"	1 1/2"	9 lbs	HT967406	71.42	68.80
7407	6"	6"	2"	24 lbs	HT967407	179.73	175.70

F.O.B. Warren, MI

1530

WILON Classic 400 Series Columbian

C-Clamps

- Patented design frame geometry allows for maximum strength with greater throat depth and lower weight
- Oscillating Head: High quality steel pad is built to last and provides firm gripping action on angular surfaces



Maximum Opening	Throat Depth	Clamping Force	Order No.	Regular Price	SALE
2"	2"	3,500 lbs	SF30402	31.15	27.67
3"	2 3/8"	3,500 lbs	SF30403	44.48	40.80
4"	3 1/4"	6,200 lbs	SF30404	62.29	56.53
6"	3 5/8"	6,600 lbs	SF30406	91.85	85.55
8"	4 1/2"	6,900 lbs	SF30408	114.82	105.39
10"	5 3/8"	8,000 lbs	SF30410	173.55	157.85
12"	5 3/4"	9,300 lbs	SF30412	275.40	245.04

25539

TECO 52 Pc. Machinist Clamping Set

For 5/8" Table Slot with 1/2" -13

T-Nuts & Studs

Set Contains:

- 4 Coupling nuts
- 6 Flange nuts
- 6 T-slot nuts
- 24 Studs, 4 each: 3, 4, 5, 6, 7 & 8" long
- 6 Step blocks
- 6 Serrated end clamps
- 1 All plastic holder



Order No.	Regular Price	SALE
SG6012625CKUS	234.63	180.60

F.O.B. Warren, MI • Purolator Dimensional Weight • Shipping Rates 25209
May Apply

MILF-BITE PRODUCTS COMPANY Multi-Fixture Clamp &

Stop

- Provides flexible set ups for hard to hold parts
- Works in both plates with tapped hole layouts or T-slot configurations
- Can be mounted vertically or horizontally
- Stops locate workpiece for repeat positioning
- Tapered mounting slot prevents movement when clamping pressure is applied
- Steps, as well as end faces of flat stops, are precision ground



Order No.	Regular Price	SALE
SG7023150	86.42	70.70

23942

TECHNIKS MagVISE ECB

- 4 sizes available to fit your application
- Each ECB vise includes 2 machinable induction blocks, wrench, extension and socket, switch-connect socket assembly, 2 stop plates, 4 toe clamps
- ECB magnetic vises easily integrate with pallet changing and tombstone systems used in production cells



Order No.	Regular Price	SALE
TE10ECB050	1377.44	1346.10
TE10ECB075	1667.28	1627.30
TE10ECB120	2311.84	2252.50
TE10ECB210	3188.26	3102.60

F.O.B. Indianapolis, IN

25246

JACOBS CHUCK Ball Bearing Super Chucks

- Designed for extra heavy duty drilling applications on production drilling machines, jig borers, milling machines, lathes and radials
- The ball thrust bearing reduces friction in the chuck's closing mechanism



Model No	Maximum Capacity	Mount Type	Key Style	Minimum Capacity	Order No.	Regular Price	SALE
8 1/2N	1/4"	Tapered	K30	0.040"	HK5030209	265.64	230.31
11N	3/8"	Tapered	K32	0.040"	HK5030215	296.03	256.56
14N	1/2"	Tapered	K3	0.040"	HK5030221	413.85	358.73
16N	5/8"	Tapered	K4	1/8"	HK5030227	475.03	411.74
18N	3/4"	Tapered	K4	1/8"	HK5030233	714.45	619.24
20N	1"	Tapered	K5	3/8"	HK5030239	962.07	833.83

23491

PRM PRO Spotting Blue-H2O

- Perfect for die spotting and layout applications
- Water soluble non-drying
- Washes off for no mess
- Can be applied with ease using brush, rollers, sprayers, etc.
- Safe, non-marring and will not deface metal surfaces
- Non-toxic
- **Alternative to Canone Blue**



Container Size	Order No.	Regular Price	SALE
16 oz	PRO310020	62.28	58.10
1 quart	PRO310030	119.39	109.50
1 gallon	PRO310040	435.63	394.10

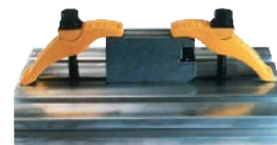
while supplies last

24323

WORKHOLDING

Rite Hite Self Positioning Hold Down Clamps

- Use on any machine with a T slot
- Instant adjustment up to 5"
- Assorted stud sizes 3/8" to 1"
- Swivel rocker attached to base



Thread Size	Length	Width	Thickness	Maximum Height	Clamp Force	Holding Capacity	Weight	Order No.	Regular Price	SALE
1"	11 1/8"	2 7/8"	3 5/16"	5"	-	65,000 lbs	12.00 lbs	SG751000L	171.76	136.55
1"	9"	2 7/8"	3 5/16"	3"	-	8,000 lbs	10.00 lbs	SG751001S	166.31	132.19
3/8"	3 1/2"	1 1/8"	1 3/32"	1 1/4"	-	10,000 lbs	0.50 lbs	SG75375L	40.83	32.47
3/8"	3"	1 1/8"	1 3/32"	1"	-	14,000 lbs	0.50 lbs	SG75376S	38.11	30.31
1/2"	5 3/4"	1 7/16"	1 13 32"	2 1/2"	-	12,800 lbs	1.40 lbs	SG75500L	54.45	43.24
1/2"	4 1/4"	1 3/8"	1 13 32"	1 3/4"	-	16,800 lbs	1.00 lbs	SG75501S	51.72	41.08
5/8"	6 3/4"	1 7/8"	1 1/2"	3 1/2"	-	18,000 lbs	2.50 lbs	SG75625L	68.05	54.11
5/8"	5 1/2"	1 7/8"	1 1/2"	2 3/4"	-	24,000 lbs	2.00 lbs	SG75626S	65.35	51.94
3/4"	9"	2 1/8"	2 3/8"	5"	-	24,000 lbs	4.75 lbs	SG75750L	95.41	75.81
3/4"	7"	2.00"	2 3/8"	3 1/2"	-	35,000 lbs	4.00 lbs	SG75751S	92.69	73.64

1256

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	75.36	70.52
5/8"	0-2 3/8"	2"	1 5/8"	3"	180 ft/lbs	10,600 lbs	SG6619102	93.93	84.56
3/4"	0-2 3/4"	2 1/2"	1 3/4"	3 3/4"	300 ft/lbs	16,000 lbs	SG6619103	142.58	136.16
7/8"	0-3 1/2"	3"	2 3/8"	4 1/4"	500 ft/lbs	21,800 lbs	SG6619104	211.17	197.60

1256

Inspection Balls

- Material: 8620 steel
- Case hardened
- Used as reference points for inspection applications in conjunction with Coordinate Measuring Machines to accurately measure the workpiece
- Concentricity of ball to shank - .0001 T.I.R.
- One-piece construction



Ball Diameter	Shank Diameter	Center of Ball to Under Shoulder	Center of Ball to End	Thread Size	Shoulder Diameter	Order No.	Regular Price	SALE
0.2500"	0.1247"	0.2000"	0.5800"	-	1/4"	SG6629060	159.97	151.00
0.3750"	0.1872"	0.3000"	0.7500"	-	3/8"	SG6629061	159.97	151.00
0.3750"	0.3125"	0.3000"	0.7400"	#8-32	1/2"	SG6629062	229.11	226.00
0.5000"	0.2497"	0.3125"	0.6300"	#6-32	1/2"	SG6629063	168.80	158.50
0.5000"	0.2497"	0.4000"	0.9300"	#6-32	1/2"	SG6629064	168.80	158.50
0.5000"	0.2497"	0.5000"	0.8800"	#6-32	1/2"	SG6629065	168.80	158.50
0.5000"	0.3750"	0.3750"	1.3100"	#10-24	5/8"	SG6629066	168.80	158.50
0.6250"	0.3750"	0.4500"	1.4200"	#10-24	5/8"	SG6629068	168.80	158.50
0.6875"	0.3750"	0.5000"	1.4700"	#10-24	3/4"	SG6629069	168.80	158.50
0.7500"	0.3750"	0.5625"	1.5300"	#10-24	3/4"	SG6629070	188.40	175.10
1.0000"	0.5000"	0.7000"	1.6400"	#10-24	1"	SG6629071	188.40	175.10

1256

NEWALL NMS300 Digital Readouts

- Spherosyn300 Scales (3 ax package with quill includes Microsyn300)
- Scale Guards
- NMS300 Reader Heads
- Scale Support Brackets
- Reader Head Mounting Bracket Kit; Two axis packages will include BPK01 (Metric); Three axis with knee will include BPK01 and KBK01 (Metric); Three axis with quill will include BPK01 and QBK01 (Metric)
- Display Mounting Arm
- Features
- 2 or 3 Axis
- Multiple Language
- 4 User Defineable Function Keys
- Absolute/Incremental operation
- Axis Pre-Set / Zero reset
- Inch/mm conversion
- Linear/segmented Error Compensation
- DigiFind/Reference mark
- Centre Find
- Undo Function
- 2 Year Warranty



PRM 1" x 42" Belt Sander

Features:

- Belt can be positioned vertically, horizontally or at any angle in between
- Front mounted On/Off paddle switch
- Guarding OSHA & ANSI compliant
- 1800 RPM
- 1/3HP 120/240V 1PH
- Weight: 45 lbs.
- 1 Year Parts Warranty



Order No.	Regular Price	SALE
PR72142	628.88	566.20

F.O.B Warren, MI • Purolator Dimensional Weight shipping rates apply • 6122
Not CSA approved

3				
X-Axis Stage Travel	Y-Axis Stage Travel	Order No.	Regular Price	SALE
12"	30"	MS3330123016BK2	2263.53	1823.59
12"	36"	MS3330123606BK3	2263.53	1959.90
12"	36"	MS3330123616BK2	2263.53	1959.90
14"	36"	MS3330143606BK3	2263.53	1959.90
14"	36"	MS3330143616BK2	2263.53	1959.90
16"	36"	MS3330163606BK3	2263.53	1959.90
16"	36"	MS3330163616BK2	2263.53	1959.90

2				
X-Axis Stage Travel	Y-Axis Stage Travel	Order No.	Regular Price	SALE
12"	30"	MS33301230XXBK1	1699.03	1476.50
12"	36"	MS33301236XXBK1	1699.03	1476.50
14"	36"	MS33301436XXBK1	1699.03	1476.50
16"	36"	MS33301636XXBK1	1699.03	1476.50

F.O.B. Columbus, OH • Additional Shipping Charges May Apply

6117

DAREX V390 Drill Sharpener

Affordable, convenient & easy to use - ideal for facilities where people of various skill levels need to be able to sharpen drills. **Specifications:**

- Motor: 15 Volt, 4.5 Amps, 1/4 HP, 60hz, 3450 RPM
- Shipping weight: 25 lbs.

Features:

- Sharpens most drill bits in less than 60 seconds
- Sharpens 1/8" - 3/4" drill bits; HSS, cobalt, TiN coated, split point
- Attaches to your vacuum system
- Choose point angle from 118° - 140°
- Grinding wheel sharpens drills 2,000 times before replacement
- 3 Year Warranty



Order No.	Regular Price	SALE
PM70V390	2550.61	2474.10

F.O.B. Ashland, OR • Not CSA Approved

23049



5500 Tomken Rd, Unit #2
 Mississauga, ON L4W 2Z4
www.caliberindustrial.com
sales@caliberindustrial.com

Mississauga: 905.624.5524
 Toronto: 416.626.7151
 Toll Free: 1.800.465.5743
 Fax: 905.602.8758

ISO 9001
 BUREAU VERITAS
 Certification



PERFORMANCE-DRIVEN GLOVES FOR EVERY JOB.



I2466

PERFORMANCE RATINGS:

ANSI Cut A7	ANSI 4	ANSI 4	ANSI / ISEA 138
CUT	ABR	PUNCT	IMPACT

SPECIFICATIONS:

Style	Q488
Description	180, A7, Foam Nitrile, Thumb Crest, Abrasion & Impact 2
Material	Fiberglass/Steelless Steel/Nylon/Lycra/HPPE/Thermoplastic Rubber
Palm	Foam Nitrile
Cut Performance	ANSI Level A7
Abrasion Performance	ANSI Level 4
Puncture Performance	ANSI Level 4
Impact Level	ANSI Level 2
Size	S-XXL
Packaging (Inner Pack)	6 pairs
Packaging (Case Pack)	72 pairs
Touchscreen	Touchscreen compatible



I2478

PERFORMANCE RATINGS:

ANSI Cut A5	ANSI 4	ANSI 4	ANSI / ISEA 138
CUT	ABR	PUNCT	IMPACT

SPECIFICATIONS:

Style	Q478
Description	180, A5, Nitrile dipped with TPR
Material	Steelless Steel/Fiberglass/HPPE/Nylon/Lycra
Palm	Foam Nitrile
Cut Performance	ANSI Cut Level A5
Abrasion Performance	ANSI Level 4
Puncture Performance	ANSI Level 4
Impact Performance	ANSI Level 1
Size	S-XXL
Packaging (Inner Pack)	6 Pairs (3 pair per polybag)
Packaging (Case Pack)	72 Pairs



Y9214

PERFORMANCE RATINGS:

ANSI Cut A6	ANSI 4	EN 388
CUT	ABR	4

SPECIFICATIONS:

Style	Y9214
Description	Cut Resistant Sandy Nitrile Palm Coated Touchscreen Gloves
Material	13 Gauge HPPE, Silicone Free, Latex Free
Palm	Sandy Nitrile
Cut Performance	ANSI Level A6
Abrasion Performance	ANSI Level A4
Puncture Performance	ANSI Level A4
Size	S-XXL
Packaging (Inner Pack)	12 Pairs
Packaging (Case Pack)	144 Pairs



Y9216

PERFORMANCE RATINGS:

ANSI Cut A7	ANSI 5	EN 388
CUT	ABR	5

SPECIFICATIONS:

Style	Y9216
Description	Seamless Knit Palm Coated Glove
Material	Blend of High Performance Fibers & Steel
Palm	Sandy Nitrile
Cut Performance	ANSI Level A7
Abrasion Performance	ANSI Level A5
Puncture Performance	ANSI Level A5
Size	S-XXL
Packaging (Inner Pack)	12 Pairs
Packaging (Case Pack)	144 Pairs



Y9219

PERFORMANCE RATINGS:

ANSI Cut A9	ANSI 4	EN 388
CUT	ABR	4

SPECIFICATIONS:

Style	Y9219
Description	180, A9, PU Coated, ANSI Puncture 4
Material	Tungsten/Fiberglass/Polyester/HPPE
Palm	Polyurethane (PU)
Cut Performance	ANSI Level A9
Abrasion Performance	ANSI Level 4
Puncture Performance	ANSI Level 4
Size	S-XXL
Packaging (Inner Pack)	12 Pairs
Packaging (Case Pack)	144 Pairs

PRICES EFFECTIVE JANUARY 1ST THROUGH MARCH 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.