

SAVE BIG ON FEATURED BRANDS



KURT
WORKHOLDING



PG.39

\$1068.93 CAD
KURT CROSSOVER VISE DX6 6" X 9"





PG.22

10% OFF
5" DYNORBITAL EXTREME SANDER





PG.36

\$125.09 CAD
1/8" STEEL PARALLEL SET





PG.16

25% OFF
6" X 9" ALUMINUM OXIDE HAND PADS





PG.20

30% OFF
MORSE V-FLANGE CAT 40

NEW!



CUTTING TOOLS



Precision Twist Drill Jobber Drills

High Speed Steel - 118° Standard Point

- A versatile general purpose drill with a conventional flute design and 118° point provides strength and makes it easy to regrind
- Uncoated improves chip flow in soft or non-ferrous materials
- Black Oxide finish for increased wear resistance can add lubricity making it suitable for drilling most materials



Drill Bit Size / Cutting Diameter (DC)	Decimal Equivalent	Flute Length	Overall Length (OAL)	Uncoated			Black Oxide		
				Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
1/16"	0.0625	-	1-7/8"	1558783	8.03	4.80	1117963	6.62	4.65
5/64"	0.0781	1"	2"	1122181	8.10	5.69	1117964	6.62	4.65
3/32"	0.0938	1-1/4"	2-1/4"	-	-	-	1117965	6.62	4.65
7/64"	0.1094	1-1/2"	2-5/8"	1122182	8.15	5.72	1117966	7.19	5.05
1/8"	0.1250	1-5/8"	2-3/4"	-	-	-	1117967	7.19	5.05
9/64"	0.1406	1-3/4"	2-7/8"	1122183	8.15	5.72	1117968	7.61	5.34
5/32"	0.1562	2"	3-1/8"	-	-	-	1117969	7.68	5.39
11/64"	0.1719	2-1/8"	3-1/4"	1122184	10.30	7.23	1117970	8.10	5.69
3/16"	0.1875	2-5/16"	3-1/2"	-	-	-	1117971	9.09	6.38
13/64"	0.2031"	2-7/16"	3-5/8"	-	-	-	1117972	10.30	7.23
7/32"	0.2188	2-1/2"	3-3/4"	-	-	-	1117973	11.57	8.12
15/64"	0.2344	2-5/8"	3-7/8"	-	-	-	1117974	12.71	8.92
17/64"	0.2656	2-7/8"	4-1/8"	-	-	-	1117975	15.72	11.04
9/32"	0.2812	2-15/16"	4-1/4"	1122185	20.75	14.57	1117976	16.10	11.30
19/64"	0.2969	3-1/16"	4-3/8"	1122186	24.11	16.93	1117977	19.15	13.44
5/16"	0.3125	3-3/16"	4-1/2"	1122187	24.64	17.30	1117978	20.52	14.41
21/64"	0.3281	3-5/16"	4-5/8"	1122188	28.69	20.14	1117979	23.20	16.29
11/32"	0.3438	3-7/16"	4-3/4"	1122189	30.44	21.37	1117980	25.18	17.68
23/64"	0.3594	3-1/2"	4-7/8"	1122190	38.07	26.73	1117981	29.22	20.51
3/8"	0.3750	3-5/8"	5"	1122191	36.78	25.82	1117982	29.30	20.57
25/64"	0.3906	3-3/4"	5-1/8"	1122192	44.18	31.01	1117983	33.88	23.78
13/32"	0.4063"	3-7/8"	5-1/4"	1122193	42.80	30.05	1117984	34.03	23.89
27/64"	0.4219	3-15/16"	5-3/8"	1122194	51.35	36.05	1117985	38.38	26.94
7/16"	0.4375	4-1/16"	5-1/2"	1122195	50.05	35.14	1117986	40.21	28.23
29/64"	0.4531	4-3/16"	5-5/8"	1122196	55.01	38.62	1117987	45.32	31.81
15/32"	0.4688	4-5/16"	5-3/4"	1122197	56.54	39.69	1117988	46.77	32.83
31/64"	0.4844	4-3/8"	5-7/8"	1122198	62.03	43.55	1117989	50.21	35.25
1/2"	0.5000	4-1/2"	6"	1122199	59.97	42.10	1117990	49.98	35.09

MORSE Jobber Length Drills

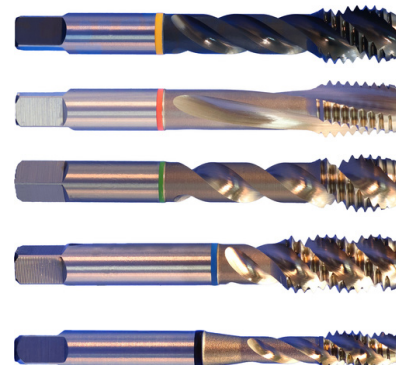
- High Speed Steel
- 118° Point
- Black Oxide-Uncoated-TiN
- Designed for drilling a wide variety of materials



Drill Bit Size / Cutting Diameter (DC)	Decimal Equivalent	Flute Length	Overall Length (OAL)	Black Oxide			Uncoated			TiN		
				Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
#53	0.0595"	7/8"	1-7/8"	1017721	4.54	3.63	1017871	3.32	2.66	1018790	7.64	5.35
1/16"	0.0625"	7/8"	1-7/8"	1017722	2.39	1.91	1017872	2.61	2.09	1018791	6.42	4.49
5/64"	0.0781"	1"	2"	1017728	2.48	1.98	1017878	2.62	2.10	1018797	6.61	4.62
#43	0.089"	1-1/4"	2-1/4"	1017733	3.15	2.52	1017883	2.96	2.37	1018802	6.75	4.72
3/32"	0.0938"	1-1/4"	2-1/4"	1017735	2.66	2.13	1017885	2.81	2.25	1018804	5.59	3.91
#36	0.1065"	1-7/16"	2-1/2"	1017741	3.21	2.57	1017891	3.05	2.44	1018810	5.45	3.81
7/64"	0.1094"	1-1/2"	2-5/8"	1017742	2.77	2.22	1017892	2.78	2.22	1018811	5.44	3.81
1/8"	0.125"	1-5/8"	2-3/4"	1017748	2.94	2.35	1017898	2.90	2.32	1018045	5.73	4.00
#30	0.1285"	1-5/8"	2-3/4"	1017750	3.22	2.58	1017899	3.24	2.59	1018817	6.65	4.66
3.3 mm	0.1299"	36 mm	2-7/8"	1036543	4.61	3.22	-	-	-	-	-	-
#29	0.136"	1-3/4"	2-7/8"	1017751	3.47	2.78	1017900	3.44	2.75	1018818	6.44	4.51
9/64"	0.1406"	1-3/4"	2-7/8"	1017753	3.11	2.49	1017902	3.15	2.52	1018820	6.63	4.65
#25	0.1495"	1-7/8"	3"	1017756	3.63	2.90	1017905	3.81	3.05	1018823	6.01	4.20
5/32"	0.1562"	2"	3-1/8"	1017759	3.64	2.91	1017908	3.64	2.91	1018825	6.34	4.44
#21	0.159"	2-1/8"	3-1/4"	1017761	3.87	3.10	1017910	4.00	3.20	1018827	6.83	4.79
#20	0.161"	2-1/8"	3-1/4"	1017762	4.05	3.24	1017911	4.03	3.22	1018828	6.88	4.82
#19	0.166"	2-1/8"	3-1/4"	1017763	3.93	3.14	1017912	3.98	3.18	1018829	7.01	4.91
11/64"	0.1719"	2-1/8"	3-1/4"	1017765	3.80	3.04	1017914	3.80	3.04	1018831	6.53	4.58
3/16"	0.1875"	2-5/16"	3-1/2"	1017771	3.99	3.19	1017920	4.18	3.34	1018835	7.12	4.98
5 mm	0.1969"	52 mm	3-5/8"	1036563	5.59	3.91	-	-	-	-	-	-
#7	0.201"	2-7/16"	3-5/8"	1017777	5.06	4.05	1017926	5.11	4.09	1018840	8.05	5.64
13/64"	0.203"	2-7/16"	3-5/8"	1017778	4.65	3.72	1017927	4.65	3.72	1018841	7.95	5.57
7/32"	0.2188"	2-1/2"	3-3/4"	1017783	4.83	3.86	1017932	4.84	3.87	1018846	7.99	5.60
15/64"	0.2344"	2-5/8"	3-7/8"	1017787	5.59	4.47	1017936	5.31	4.25	1018849	8.29	5.80
1/4"-E	0.25"	2-3/4"	4"	1017791	5.54	4.43	1017940	5.54	4.43	1018853	9.04	6.33
F	0.257"	2-7/8"	4-1/8"	1017792	7.11	5.69	1017941	6.81	5.45	1018854	15.43	10.79
17/64"	0.2656"	2-7/8"	4-1/8"	1017794	6.34	5.07	1017943	6.68	5.34	1018855	17.09	11.97
9/32"	0.2812"	2-15/16"	4-1/4"	1017799	6.81	5.45	1017948	6.81	5.45	1018860	16.51	11.55
19/64"	0.2969"	3-1/16"	4-3/8"	1017802	7.87	6.30	1017951	8.25	6.60	1018863	17.31	12.12
5/16"	0.3125"	3-3/16"	4-1/2"	1017804	7.98	6.38	1017953	8.36	6.69	1018865	17.85	12.50
21/64"	0.3281"	3-5/16"	4-5/8"	1017807	9.03	7.22	1017956	9.04	7.23	1018868	18.94	13.26
11/32"	0.3438"	3-7/16"	4-3/4"	1017810	9.85	7.88	1017959	9.86	7.89	1018871	20.29	14.20
23/64"	0.3594"	3-1/2"	4-7/8"	1017813	11.06	8.85	1017962	11.63	9.30	1018874	22.13	15.50
3/8"	0.375"	3-5/8"	5"	1017815	11.54	9.23	1017964	11.55	9.24	1018876	23.58	16.51
25/64"	0.3906"	3-3/4"	5-1/8"	1017818	13.30	10.64	1017967	13.31	10.65	1018879	31.04	21.73
13/32"	0.406"	3-7/8"	5-1/4"	1017821	14.28	11.42	1017970	15.00	12.00	1018882	32.78	22.95
27/64"	0.4219"	3-15/16"	5-3/8"	1017823	16.06	12.85	1017972	16.07	12.86	1018884	31.96	22.37
7/16"	0.4375"	4-1/16"	5-1/2"	1017824	16.45	13.16	1017973	17.26	13.81	1018885	32.85	22.99
29/64"	0.4531"	4-3/16"	5-5/8"	1017825	17.89	14.31	1017974	17.89	14.31	1018886	36.29	25.40
1/2"	0.5"	4-1/2"	6"	1017828	22.11	17.69	1017977	22.12	17.70	1018889	41.56	29.09

CUTTING TOOLS

SINGLE M TAP MORSE Color Ring Taps



Spiral Flute

- **Blue Ring:** General-purpose machining for low to high carbon steels, low alloy steels, and steel castings or forgings.
- **Yellow Ring:** Designed for tough materials including stainless steels, heat/corrosion-resistant alloys, valve stainless steel, and high-carbon tool steels.
- **Red Ring:** Ideal for high-tensile and superalloy materials such as titanium, Inconel, Waspaloy, Hastelloy, Monel, and high-strength stainless steels.
- **Black Ring:** Multi-purpose option for a wide range of materials including steels, stainless steels, aluminum, cast iron, copper, and brass.
- **Green Ring:** Optimized specifically for all aluminum materials, including pure aluminum, aluminum alloys, and aluminum castings.

Uncoated																				
					Series/List - #3098			Series/List - #3092			Series/List - #4002			Series/List - #3096			Series/List - #3094			
Thread Diameter Size (TDZ)	Threads per Inch (TPI)	Thread Tolerance Class (TCTR)	Thread Cutting Part Length (THL)	Overall Length (OAL)	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	40	H2	0.236"	1-7/8"	7485238	28.02	22.42	7485849	20.73	16.58	7485380	24.59	19.67	7485422	49.80	39.84	7485455	24.59	19.67	
#4	48	H2	0.236"	1-7/8"	7485239	28.02	22.42	-	-	-	-	-	-	-	-	-	-	-	-	
#5	40	H2	0.236"	1-15/16"	7485240	28.02	22.42	-	-	-	-	-	-	-	-	-	-	-	-	
#5	44	H2	0.236"	1-15/16"	7485241	28.02	22.42	-	-	-	-	-	-	-	-	-	-	-	-	
#6	40	H2	0.276"	2"	7485243	27.51	22.01	-	-	-	-	-	-	-	-	-	-	-	-	
#6	32	H3	0.276"	2"	7485242	27.51	22.01	7485850	21.47	17.18	7485381	22.15	17.72	7485935	46.72	37.38	7485970	22.15	17.72	
#8	32	H3	0.276"	2-1/8"	7485244	32.62	26.10	7485851	25.61	20.49	7485382	28.44	22.75	7485423	44.70	35.76	7485456	28.44	22.75	
#8	36	H2	0.276"	2-1/8"	7485245	32.62	26.10	-	-	-	-	-	-	-	-	-	-	-	-	
#10	24	H3	0.354"	2-3/8"	7485246	32.03	25.62	7485360	26.29	21.03	7485383	28.18	22.54	7485936	46.11	36.89	7485971	29.11	23.29	
#10	32	H3	0.276"	2-3/8"	7485247	32.03	25.62	7485852	26.29	21.03	7485384	28.18	22.54	7485937	46.11	36.89	7485972	28.18	22.54	
#12	28	H3	0.276"	2-3/8"	7485249	32.03	25.62	-	-	-	-	-	-	-	-	-	-	-	-	
#12	24	H3	0.354"	2-3/8"	7485248	32.03	25.62	-	-	-	-	-	-	-	-	-	-	-	-	
1/4"	20	H3	0.4375"	2-1/2"	-	-	-	7485853	25.61	20.49	7485385	27.45	21.96	7485938	49.80	39.84	7485457	28.44	22.75	
1/4"	28	H3	0.354"	2-1/2"	-	-	-	7485854	26.52	21.22	7485386	27.45	21.96	7485939	51.41	41.13	7485973	28.44	22.75	
1/4"	28	H4	0.354"	2-1/2"	7485251	32.62	26.10	-	-	-	-	-	-	-	-	-	-	-	-	
1/4"	20	H5	0.4375"	2-1/2"	7485250	32.62	26.10	-	-	-	-	-	-	-	-	-	-	-	-	
5/16"	18	H3	0.4688"	2-23/32"	-	-	-	7485855	36.27	29.02	7485387	36.27	29.02	7485940	54.74	43.79	7485974	36.27	29.02	
5/16"	24	H4	0.394"	2-23/32"	7485253	41.52	33.22	-	-	-	-	-	-	-	-	-	-	-	-	
5/16"	24	H3	0.394"	2-23/32"	-	-	-	7485856	36.27	29.02	7485388	36.27	29.02	7485941	54.74	43.79	7485975	36.27	29.02	
5/16"	18	H5	0.4688"	2-23/32"	7485252	41.52	33.22	-	-	-	-	-	-	-	-	-	-	-	-	
3/8"	24	H3	0.394"	2-15/16"	-	-	-	7485858	43.51	34.81	7485390	41.99	33.59	7485943	63.21	50.57	7485977	43.46	34.77	
3/8"	16	H5	0.551"	2-15/16"	7485254	49.95	39.96	-	-	-	-	-	-	-	-	-	-	-	-	
3/8"	16	H3	0.551"	2-15/16"	-	-	-	7485857	43.51	34.81	7485389	41.99	33.59	7485942	63.21	50.57	7485976	41.99	33.59	
3/8"	24	H4	0.394"	2-15/16"	7485255	49.95	39.96	-	-	-	-	-	-	-	-	-	-	-	-	
7/16"	14	H3	0.5938"	3-5/32"	-	-	-	7485859	63.04	50.43	7485391	63.04	50.43	7485944	91.30	73.04	7485978	65.21	52.17	
7/16"	14	H5	0.5938"	3-5/32"	7485256	74.85	59.88	-	-	-	-	-	-	-	-	-	-	-	-	
7/16"	20	H3	0.472"	3-5/32"	-	-	-	-	-	-	-	-	-	7485424	88.39	70.71	-	-	-	
7/16"	20	H5	0.472"	3-5/32"	7485258	74.85	59.88	-	-	-	-	-	-	-	-	-	-	-	-	
1/2"	13	H3	0.63"	3-3/8"	-	-	-	7485361	74.15	59.32	7485392	74.15	59.32	7485945	100.64	80.51	7485458	71.81	57.45	
1/2"	20	H5	0.63"	3-3/8"	7485261	85.20	68.16	-	-	-	-	-	-	-	-	-	-	-	-	
1/2"	20	H3	0.63"	3-3/8"	-	-	-	7485860	71.81	57.45	7485393	71.81	57.45	7485946	100.64	80.51	7485979	71.81	57.45	
1/2"	13	H5	0.63"	3-3/8"	7485260	85.20	68.16	-	-	-	-	-	-	-	-	-	-	-	-	
9/16"	12	H5	0.6875"	3-19/32"	7485257	93.06	74.45	-	-	-	-	-	-	-	-	-	-	-	-	
9/16"	18	H5	0.512"	3-19/32"	7485259	93.06	74.45	-	-	-	-	-	-	-	-	-	-	-	-	
5/8"	18	H3	0.512"	3-13/16"	-	-	-	7485862	73.05	58.44	7485395	75.25	60.20	7485948	229.38	183.50	7485459	77.78	62.22	
5/8"	18	H5	0.512"	3-13/16"	7485263	93.06	74.45	-	-	-	-	-	-	-	-	-	-	-	-	
5/8"	11	H5	0.75"	3-13/16"	7485262	93.06	74.45	-	-	-	-	-	-	-	-	-	-	-	-	
5/8"	11	H3	0.75"	3-13/16"	-	-	-	7485861	73.05	58.44	7485394	75.25	60.20	7485947	229.38	183.50	7485980	75.25	60.20	
3/4"	16	H3	0.591"	4-1/4"	-	-	-	7485864	107.40	85.92	7485397	126.49	101.19	7485950	302.65	242.12	7485982	122.76	98.21	
3/4"	10	H3	0.8125"	4-1/4"	-	-	-	7485863	104.18	83.34	7485396	122.76	98.21	7485949	294.28	235.42	7485981	126.49	101.19	
3/4"	10	H5	0.8125"	4-1/4"	7485264	145.35	116.28	-	-	-	-	-	-	-	-	-	-	-	-	
3/4"	16	H5	0.591"	4-1/4"	7485265	145.35	116.28	-	-	-	-	-	-	-	-	-	-	-	-	
7/8"	9	H4	0.827"	4-11/16"	-	-	-	7485865	169.22	135.38	7485398	178.32	142.66	-	-	-	7485460	178.32	142.66	
7/8"	14	H6	0.709"	4-11/16"	7485267	213.43	170.74	-	-	-	-	-	-	-	-	-	-	-	-	
7/8"	14	H4	0.709"	4-11/16"	-	-	-	7485866	169.22	135.38	7485399	172.99	138.39	-	-	-	7485461	178.32	142.66	
7/8"	9	H6	0.827"	4-11/16"	7485266	213.43	170.74	-	-	-	-	-	-	-	-	-	-	-	-	
1"	8	H4	0.984"	5-1/8"	-	-	-	7485867	225.29	180.23	7485400	240.27	192.22	-	-	-	7485983	240.27	192.22	
1"	12	H6	0.709"	5-1/8"	7485269	284.49	227.59	-	-	-	-	-	-	-	-	-	-	-	-	
1"	12	H4	0.709"	5-1/8"	-	-	-	-	-	-	-	-	-	-	-	-	7485984	247.49	197.99	
1"	8	H6	0.984"	5-1/8"	7485268	284.49	227.59	-	-	-	-	-	-	-	-	-	-	-	-	

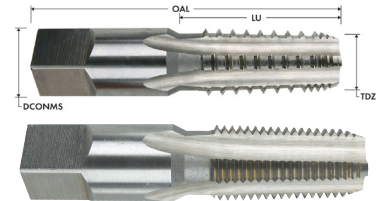
**MORSE Color Ring Taps (cont.)**

Steam Oxide					Series/List - #3092			Series/List - #3096			Series/List - #3094		
Thread Diameter Size (TDZ)	Threads per Inch (TPI)	Thread Tolerance Class (TCTR)	Thread Cutting Part Length (THL)	Overall Length (OAL)	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
#4	40	H2	0.236"	1-7/8"	-	-	-	7485732	51.41	41.13	7486100	25.44	20.35
#4	40	H2	0.313"	1-7/8"	7486020	20.73	16.58	-	-	-	-	-	-
#6	32	H3	3/8"	2"	7486021	20.73	16.58	-	-	-	-	-	-
#6	32	H3	0.276"	2"	-	-	-	7485733	46.72	37.38	7486101	22.97	18.38
#8	32	H3	0.276"	2-1/8"	-	-	-	7485734	46.11	36.89	7485785	28.44	22.75
#8	32	H3	3/8"	2-1/8"	7486022	26.52	21.22	-	-	-	-	-	-
#10	24	H3	0.354"	2-3/8"	-	-	-	7485735	44.70	35.76	7486102	29.11	23.29
#10	32	H3	1/2"	2-3/8"	7486023	27.17	21.74	-	-	-	-	-	-
#10	32	H3	0.276"	2-3/8"	-	-	-	7485736	46.11	36.89	7486103	29.11	23.29
#10	24	H3	1/2"	2-3/8"	7485518	27.17	21.74	-	-	-	-	-	-
1/4"	20	H3	0.4375"	2-1/2"	7486024	26.52	21.22	7485737	51.41	41.13	7485786	28.44	22.75
1/4"	28	H3	0.433"	2-1/2"	-	-	-	7485738	51.41	41.13	7486104	28.44	22.75
1/4"	28	H3	5/8"	2-1/2"	7486025	26.52	21.22	-	-	-	-	-	-
5/16"	24	H3	0.688"	2-23/32"	7486027	34.98	27.98	-	-	-	-	-	-
5/16"	18	H3	0.4688"	2-23/32"	7486026	36.27	29.02	7485739	56.56	45.25	7486105	36.27	29.02
5/16"	24	H3	0.472"	2-23/32"	-	-	-	7485740	56.56	45.25	7486106	36.27	29.02
3/8"	16	H3	0.551"	2-15/16"	-	-	-	7485741	65.27	52.22	7486107	43.46	34.77
3/8"	16	H3	3/4"	2-15/16"	7486028	42.07	33.66	-	-	-	-	-	-
3/8"	24	H3	0.551"	2-15/16"	-	-	-	7485742	65.27	52.22	7486108	43.46	34.77
3/8"	24	H3	3/4"	2-15/16"	7486029	42.07	33.66	-	-	-	-	-	-
7/16"	14	H3	0.5938"	3-5/32"	7486030	65.21	52.17	7485743	88.39	70.71	7486109	65.21	52.17
7/16"	20	H3	0.472"	3-5/32"	-	-	-	7485744	91.30	73.04	-	-	-
1/2"	13	H3	0.63"	3-3/8"	-	-	-	7485745	100.64	80.51	7486110	74.15	59.32
1/2"	20	H3	0.938"	3-3/8"	7486032	71.81	57.45	-	-	-	-	-	-
1/2"	20	H3	0.63"	3-3/8"	-	-	-	7485746	97.46	77.97	7486111	74.15	59.32
1/2"	13	H3	0.938"	3-3/8"	7486031	74.15	59.32	-	-	-	-	-	-
5/8"	18	H3	1.094"	3-13/16"	7486034	70.67	56.54	-	-	-	-	-	-
5/8"	18	H3	0.572"	3-13/16"	-	-	-	7485748	235.93	188.74	7485787	77.78	62.22
5/8"	11	H3	0.75"	3-13/16"	7486033	73.05	58.44	7485747	235.93	188.74	7486112	77.78	62.22
3/4"	16	H3	0.591"	4-1/4"	-	-	-	7485750	302.65	242.12	7486114	122.76	98.21
3/4"	10	H3	0.8125"	4-1/4"	7486035	107.40	85.92	7485749	302.65	242.12	7486113	124.81	99.85
3/4"	16	H3	1.219"	4-1/4"	7486036	107.40	85.92	-	-	-	-	-	-
7/8"	9	H4	0.827"	4-11/16"	-	-	-	-	-	-	7485788	172.99	138.39
7/8"	14	H4	0.709"	4-11/16"	-	-	-	-	-	-	7485789	178.32	142.66
7/8"	14	H4	1.344"	4-11/16"	7486038	174.21	139.37	-	-	-	-	-	-
7/8"	9	H4	1.344"	4-11/16"	7486037	169.22	135.38	-	-	-	-	-	-
1"	8	H4	0.764"	5-1/8"	-	-	-	-	-	-	7486115	240.27	192.22
1"	12	H4	0.984"	5-1/8"	-	-	-	-	-	-	7486116	247.49	197.99
1"	8	H4	1-1/2"	5-1/8"	7486039	225.29	180.23	-	-	-	-	-	-

61341

MORSE Taper Pipe Taps
List No. 2119 Regular Thread and List No. 2113 NPT-Interrupted

- Regular Thread NPT taper pipe taps are commonly used for tapping pipe fittings and couplings in a wide variety of materials. Assembly requires the use of a thread sealant to ensure a tight seal
- NPTF Dryseal taper pipe taps produce threads where a tight seal is achieved during assembly by metal-to-metal contact. Used for applications requiring a tight seal without the use of thread sealants
- Interrupted Thread taper pipe taps reduce friction, increase chip capacity and enhance coolant flow to the cutting teeth for reduced chance of torn threads and improved thread quality. Recommended for a wide variety of materials, especially soft ductile materials and materials producing long continuous chips



					Series/List - # 2119			Series/List - # 2113		
Thread Size	Connection Diameter Machine Side (DCONMS)	Usable Length (LU)	Overall Length (OAL)	Flute Count (NOF)	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
1/16" - 27	5/16"	11/16"	2-1/8"	4	1031298	45.10	31.57	-	-	-
1/8" - 27	5/16"	3/4"	2-1/8"	4	1031299	43.93	30.76	1031251	69.90	48.93
1/8" - 27	7/16"	3/4"	2-1/8"	5	1031280	43.93	30.76	1031263	69.90	48.93
1/4" - 18	9/16"	1-1/16"	2-7/16"	4	1031282	45.13	31.58	1031254	79.01	55.31
3/8" - 18	0.7"	1-1/16"	2-9/16"	4	1031302	64.39	45.07	1031255	99.31	69.52
1/2" - 14	11/16"	1-3/8"	3-1/8"	5	1031286	98.56	68.99	1031256	155.07	108.56
3/4" - 14	0.9063"	1-3/8"	3-1/4"	5	1031304	145.00	101.50	1031257	222.49	155.74
1" - 11.5	1-1/8"	1-3/4"	3-3/4"	5	1031305	218.59	153.01	1031258	353.40	247.38
1-1/4" - 11.5	1-5/16"	1-3/4"	4"	5	1031293	309.51	216.66	1031259	487.09	340.96
1-1/2" - 11.5	1-1/2"	1-3/4"	4-1/4"	7	1031307	415.41	290.78	1031260	654.14	457.90
2" - 11.5	1-7/8"	1-3/4"	4-1/2"	7	1031308	570.39	399.27	1031261	888.11	621.68

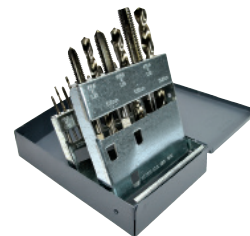
61340

CUTTING TOOLS

PRO CUT 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	Cutting Edge Material	Packing	Order No.	Regular Price	SALE
PCUET504099TDS-I ProCut	HSS	Metal Index	0425016	173.05	116.12

2941

PRO CUT 64 Pc. Tap & Die Sets

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

- In self-hinged durable plastic case with tray
- Complete set includes one each plug tap and die for the following 28 thread sizes plus tools indicated:
- Thread sizes: 1" round dies: 4-40, 8-32, 10-32, 1/4-20, 5/16-18, 3/8-16, 7/16-14, 1/2-13, 1/8-27 NPT, 6-32, 10-24, 12-24, 1/4-28, 5/16-24, 3/8-24, 7/16-20, 1/2-20
- Thread sizes: 1-1/2" round dies: 9/16-12, 5/8-11, 3/4-10, 9/16-18, 5/8-18, 3/4-16, 1/4-18 NPT pipe die is solid round
- Thread sizes: 2" round dies: 7/8-9, 7/8-14, 1-8, 1-14
- Threading tools: 1" die stock, 1-1/2" die stock, 2" die stock, 2" handle, tap wrenches, T-handle tap wrench, screw pitch gauge, screwdriver



Cutting Edge Material	Packing	Order No.	Regular Price	SALE
Carbon Steel	Plastic Case	0425021	786.28	446.61
HSS	Plastic Case	0425027	1638.53	930.69

5977

PRO CUT 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, 1/4-20, 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	Packing	Order No.	Regular Price	SALE
Carbon Steel	Plastic Case	0425020	263.07	149.42
HSS	Plastic Case	0425025	559.62	317.87

2942



HY-PRO® CARB VGM5 Series



Unique Flute Geometry - A8:G8

- Variable Index - Reduces vibration during machining
- Unique Flute Geometry - Maintains excellent cutting edge sharpness and tool rigidity
- EXO Coating - Provides longer tool life through exceptional wear and heat resistance



				SQ			0.015"			0.02"			0.03"			0.06"			0.09"		
Cutting Diam- eter (DC)	Decimal Equiva- lent	Depth of Cut Maximum (APMX)	Overall Length (OAL)	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
1/8"	0.125"	3/16"	1-1/2"	1222217	43.44	31.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/8"	0.125"	1/4"	1-1/2"	1170351	43.76	31.92	1222221	45.50	33.18	-	-	-	1222222	45.50	33.18	-	-	-	-	-	-
1/8"	0.125"	3/8"	1-1/2"	1222223	45.72	33.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/8"	0.125"	3/8"	2-1/4"	1223089	59.44	43.37	1223091	60.33	44.00	-	-	-	1223092	60.33	44.00	-	-	-	-	-	-
1/8"	0.125"	1/2"	2-1/4"	1223095	60.33	44.00	-	-	-	-	-	-	1223098	64.93	47.36	-	-	-	-	-	-
1/8"	0.125"	5/8"	2-1/4"	1222229	61.73	45.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/8"	0.125"	3/4"	2-1/4"	1222234	66.28	48.36	1222236	68.50	49.98	-	-	-	1222237	68.50	49.98	-	-	-	-	-	-
1/8"	0.125"	3/4"	3"	1223100	64.93	47.36	-	-	-	-	-	-	1223113	69.51	50.71	-	-	-	-	-	-
1/8"	0.125"	1"	3"	1223114	69.51	50.71	1223116	87.79	64.04	-	-	-	1223131	87.79	64.04	-	-	-	-	-	-
1/4"	0.25"	3/8"	2"	1170352	63.94	46.63	1222327	72.28	52.72	1222337	72.28	52.72	1222338	72.28	52.72	1222340	72.28	52.72	-	-	-
1/4"	0.25"	1/2"	2-1/2"	1222354	77.24	56.35	1222356	78.64	57.37	1222357	78.64	57.37	1222358	78.64	57.37	1222369	78.64	57.37	-	-	-
1/4"	0.25"	3/4"	2-1/2"	1222370	83.66	61.03	1222372	85.54	62.40	1222374	85.54	62.40	1222375	85.54	62.40	1222376	85.54	62.40	-	-	-
1/4"	0.25"	1"	3"	1222377	114.30	83.37	1222379	119.83	87.40	1222380	119.83	87.40	1222381	119.83	87.40	1222398	119.83	87.40	-	-	-
1/4"	0.25"	1-1/4"	3"	1222418	116.59	85.05	-	-	-	1222419	118.66	86.56	-	-	-	-	-	-	-	-	-
1/4"	0.25"	1-1/2"	3"	1222420	128.00	93.38	-	-	-	1222421	130.30	95.05	-	-	-	-	-	-	-	-	-
1/4"	0.25"	3/4"	4"	1223183	107.44	78.37	1223185	108.81	79.38	1223186	108.81	79.38	1223187	108.81	79.38	1223188	108.81	79.38	-	-	-
1/4"	0.25"	1"	4"	1223189	132.57	96.70	1223191	134.86	98.38	1223192	134.86	98.38	1223193	134.86	98.38	1223204	134.86	98.38	-	-	-
1/4"	0.25"	1-1/4"	4"	1223205	134.86	98.38	1223207	136.23	99.37	1223208	136.23	99.37	1223209	136.23	99.37	1223210	136.23	99.37	-	-	-
1/4"	0.25"	1-1/2"	4"	1223211	137.17	100.06	1223213	138.52	101.05	1223214	138.52	101.05	1223215	138.52	101.05	1223216	138.52	101.05	-	-	-
1/4"	0.25"	2"	4"	1223226	141.74	103.39	-	-	-	1223274	144.90	105.70	-	-	-	-	-	-	-	-	-
1/4"	0.25"	2-1/2"	4"	1223275	144.93	105.71	-	-	-	1223276	144.93	105.71	-	-	-	-	-	-	-	-	-
5/16"	0.3125"	15/32"	2"	1222428	81.80	59.67	-	-	-	1222430	100.49	73.30	1222431	100.53	73.33	1222432	100.53	73.33	-	-	-
5/16"	0.3125"	5/8"	2-1/2"	1170356	110.19	80.39	-	-	-	1222434	111.47	81.31	1222435	111.47	81.31	1222436	111.47	81.31	-	-	-
5/16"	0.3125"	15/16"	3"	1222437	128.91	94.04	-	-	-	1222438	132.51	96.66	1222439	132.51	96.66	1222440	132.51	96.66	-	-	-
5/16"	0.3125"	1-1/4"	3"	1222441	152.25	111.06	-	-	-	1222442	155.81	113.65	-	-	-	-	-	-	-	-	-
3/8"	0.375"	9/16"	2"	1170349	117.75	81.51	1222444	113.79	83.01	1222445	113.79	83.01	1222446	113.79	83.01	1222459	113.79	83.01	1222460	113.79	83.01
3/8"	0.375"	3/4"	2-1/2"	1222461	131.95	96.25	-	-	-	1222498	133.07	97.08	1222499	133.08	97.08	1222506	133.08	97.08	1222509	133.08	97.08
3/8"	0.375"	1-1/8"	3"	1222510	153.16	111.72	1222512	156.38	114.07	1222513	156.38	114.07	1222514	156.38	114.07	1222515	156.38	114.07	1222516	156.38	114.07
3/8"	0.375"	1-1/8"	4"	1223277	115.50	84.25	1223279	117.03	85.37	1223280	117.03	85.37	1223281	117.03	85.37	1223282	117.03	85.37	1223283	117.03	85.37
3/8"	0.375"	1-1/2"	4"	1222517	163.21	119.06	-	-	-	1222525	165.90	121.02	1222526	165.90	121.02	1223288	141.74	103.39	1222528	165.90	121.02
3/8"	0.375"	1-7/8"	4"	1223290	182.90	133.42	1223292	191.98	140.04	1223293	191.98	140.04	1223294	191.98	140.04	1223295	191.98	140.04	1223296	191.98	140.04
3/8"	0.375"	2-1/4"	5"	1223297	228.58	166.74	-	-	-	1223299	237.72	173.40	1223300	237.72	173.40	1223301	237.72	173.40	1223302	237.72	173.40
3/8"	0.375"	3"	6"	1223303	251.45	183.43	-	-	-	1223305	256.02	186.76	1223306	256.02	186.76	-	-	-	-	-	-
1/2"	0.5"	5/8"	2-1/2"	1170355	173.68	126.70	1222530	175.10	127.72	1222531	175.10	127.72	1222532	175.10	127.72	1222534	175.10	127.72	1222535	175.10	127.72
1/2"	0.5"	1"	3"	1170350	191.98	140.04	1222539	193.38	141.06	1222540	193.38	141.06	1222541	193.38	141.06	1222542	193.38	141.06	1222543	193.38	141.06
1/2"	0.5"	1-1/4"	3"	1222546	205.27	149.73	1222549	209.40	152.74	1222550	209.40	152.74	1222551	209.40	152.74	1222552	209.40	152.74	1222553	209.40	152.74
1/2"	0.5"	1-1/2"	4"	1222556	252.83	184.44	1223316	260.60	190.09	1223317	260.60	190.09	1222558	258.64	188.66	1222559	258.62	188.65	1222560	258.62	188.65
1/2"	0.5"	2"	4"	1222563	263.55	192.25	1223325	283.44	206.77	1223326	283.44	206.77	1222565	266.42	194.35	1222566	266.45	194.36	-	-	-
1/2"	0.5"	2-1/2"	5"	1222573	266.45	194.36	1225045	374.88	273.46	1225047	374.88	273.46	1222575	266.45	194.36	1222576	266.45	194.36	-	-	-
1/2"	0.5"	3"	6"	1225059	406.90	296.81	-	-	-	-	-	-	1225062	416.01	303.46	1225065	416.01	303.46	1225175	416.01	303.46
1/2"	0.5"	4"	6"	1225230	420.60	306.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/2"	0.5"	5"	7"	1225442	480.00	350.14	-	-	-	-	-	-	1225463	493.75	360.16	1225472	493.75	360.16	-	-	-
5/8"	0.625"	25/32"	3"	1222578	310.87	226.77	-	-	-	1222579	320.03	233.44	1222580	320.03	233.44	1222581	320.03	233.44	1222582	320.03	233.44
5/8"	0.625"	15/16"	3"	1222589	333.75	243.46	-	-	-	1222590	342.90	250.12	1222600	342.90	250.12	-	-	-	-	-	-
5/8"	0.625"	1-1/4"	3-1/2"	1170357	361.17	263.45	-	-	-	1222612	374.88	273.46	1222613	374.88	273.46	1222624	374.88	273.46	1222625	374.88	273.46
5/8"	0.625"	1-9/16"	3-1/2"	1222627	393.15	286.79	-	-	-	1222628	397.73	290.12	1222629	397.73	290.12	1222630	397.73	290.12	-	-	-
5/8"	0.625"	1-7/8"	5"	1222633	397.73	290.12	-	-	-	1222634	425.21	310.17	1222635	434.31	316.82	1222646	434.31	316.82	1222647	434.31	316.82
5/8"	0.625"	2-1/2"	5"	1222650	485.97	354.49	-	-	-	1222651	493.75	360.16	1222652	493.75	360.16	-	-	-	1222654	493.75	360.16
5/8"	0.625"	2-1/2"	6"	1225635	548.62	400.20	-	-	-	1225637	571.47	416.86	1225638	571.47	416.86	1225639	571.47	416.86	-	-	-
5/8"	0.625"	3-1/8"	6"	1225642	571.47	416.86	-	-	-	1225644	585.20	426.87	-	-	-	-	-	-	-	-	-
5/8"	0.625"	3-3/4"	6"	-	-	-	-	-	-	1225675	635.47	463.55	1225676	635.47	463.55	-	-	-	-	-	-
3/4"	0.75"	15/16"	3"	1222656	480.00	350.14	-	-	-	1222657	484.60	353.50	1222658	484.60	353.50	1222659	484.60	353.50	1222660	4	

CUTTING TOOLS

NOGA Replacement Blades



0558634



0558775



127093B

Blade Type	Hand Operation	Blade Material	Order No.	TiN			Uncoated			TiAlN		
				Regular Price	SALE		Regular Price	SALE		Regular Price	SALE	
S10TiN	Right Hand	High Speed Steel TiN Coated	0558778	6.09	4.24		0558775	4.94	2.70	127093B	6.03	4.80
S101	Right Hand	High Speed Steel	0558782	3.84	3.09		0558780	5.00	2.74	-		
S150	Right Hand	High Speed Steel	0558634	5.54	4.45		0558783	5.73	3.15	-		
S20	Right Hand	High Speed Steel	-				0558784	5.39	2.97	127094B	6.03	4.80
S202	Right Hand	High Speed Steel	-				0558785	5.61	3.09	-		
S30	Right Hand	High Speed Steel	-				0558786	5.39	2.97	-		
S35	Right Hand	High Speed Steel	-				0558787	5.47	3.01	127095B	6.03	4.80
S60	Right Hand	High Speed Steel	-				0558788	7.63	5.31	-		

61327



High Speed Steel TiAlN Coated Blade Sets



127098B



127097B



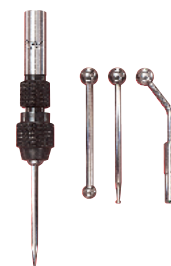
127096B

Included	Blade Material	Order No.	Regular Price	SALE
Handle with 3pcs-S10, 1pcs - S20 & 1pcs - S35 TiAlN Blades	High Speed Steel	127096B	28.88	22.99
Handle with 10pcs S10 TiAlN Blades	High Speed Steel	127097B	60.38	48.06
Handle with 10psc - S20 TiAlN Blades	High Speed Steel	127098B	60.38	48.06

61328

Starrett Wiggler or Center Finder

- 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

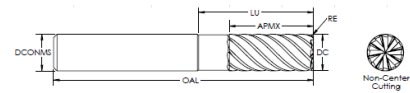


Includes	Order No.	Regular Price	SALE
Disc Contact Attachment	1069269	25.90	23.34
Ball Contact Attachment	1069268	14.70	13.24
Offset Indicator Holder	1069270	28.00	25.23
Wiggler Point	1069267	54.60	49.20
5 Piece Wiggler Set	1069265	137.20	123.62
4 Piece Wiggler Set (No Case)	1069266	89.60	80.72

10187

**M.A. Ford TuffCut® XM****Series XMHN**

- Nano-grain carbide grade - Optimum high hardness & fracture toughness
- 45° helix, negative radial rake geometry - Optimum balance of edge strength & shear power
- High flute count (8-flute) - High feedrates & reduced tool wear
- High-precision diameter



Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Depth of Cut Maximum (APMX)	Overall Length (OAL)	Usable Length (LU)	Corner Radius (RE) / Chamfer Width (CHW)	Order No.	Regular Price	SALE
6 mm	6 mm	13 mm	63 mm	20 mm	0.2 mm	768015A	110.99	94.68
6 mm	6 mm	13 mm	63 mm	20 mm	0.5 mm	768016A	110.99	94.68
8 mm	8 mm	19 mm	65 mm	26 mm	0.2 mm	768017A	183.48	156.51
8 mm	8 mm	19 mm	65 mm	26 mm	0.5 mm	768018A	183.48	156.51
10 mm	10 mm	22 mm	75 mm	32 mm	0.2 mm	768019A	230.20	196.36
10 mm	10 mm	22 mm	75 mm	32 mm	0.5 mm	768020A	230.20	196.36
12 mm	12 mm	26 mm	85 mm	38 mm	0.2 mm	768021A	306.94	261.81
12 mm	12 mm	26 mm	85 mm	38 mm	0.5 mm	768022A	306.94	261.81
16 mm	16 mm	34 mm	100 mm	50 mm	0.5 mm	768023A	509.12	434.28
1/4"	1/4"	3/4"	2-1/2"	-	0.01"	768007A	93.83	80.04
1/4"	1/4"	3/4"	2-1/2"	-	0.03"	768008A	93.83	80.04
3/8"	3/8"	1"	2-1/2"	-	0.01"	768009A	160.06	136.53
3/8"	3/8"	1"	2-1/2"	-	0.03"	768010A	160.06	136.53
1/2"	1/2"	1-1/4"	3"	-	0.01"	768011A	247.00	210.69
1/2"	1/2"	1-1/4"	3"	-	0.03"	768012A	247.00	210.69
5/8"	5/8"	1-5/8"	4"	-	0.03"	768013A	560.85	478.41
3/4"	3/4"	1-5/8"	4"	-	0.03"	768014A	646.14	551.17

61313

**duMont® Keyway Broach Sets**

- Now you can make precision holes or keyways in seconds... a few at a time or production quantities... by a simple push-through broaching operation using a hand operated arbor press or hydraulic press
- All sets furnished in handsome varnished wood box come complete with precision broaches, slotted bushings, and necessary shims
- Set No. 00 - the most common keyway combinations for small keyways and bores. 3 broaches & 5 bushings = 15 combinations



Bushings	Style	Order No.	Regular Price	SALE
1/4 5/16 3/8 7/16 1/2	A	0433499	602.92	570.98

12683

CUTTING TOOLS



Single Flute Countersinks

High Speed Steel

- Ideal for chamfering, deburring and countersinking



Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Shank Length (LS)	Overall Length (OAL)	60 Degrees			82 Degrees			90 Degrees			100 Degrees			120 Degrees		
				Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
1/8"	1/8"	-	1-1/4"	0217812	19.11	17.21	0217814	19.11	17.21	0217816	19.11	17.21	0217806	19.11	17.21	0217810	19.11	17.21
3/16"	3/16"	-	1-3/8"	0217800	19.60	17.64	0217802	19.60	17.64	0217804	19.60	17.64	0217794	19.60	17.64	0217798	19.60	17.64
1/4"	1/4"	-	1-1/2"	0217788	20.37	18.34	0217790	20.37	18.34	0217792	20.37	18.34	0217782	20.37	18.34	0217786	20.37	18.34
1/2"	1/4"	1"	2"	0217872	23.23	20.90	0217874	23.23	20.90	0217876	23.23	20.90	0217866	23.23	20.90	0217870	23.23	20.90
1-1/2"	3/4"	1-1/4"	2-7/8"	0217776	28.41	25.56	0217778	28.41	25.56	0217780	28.41	25.56	0217770	28.41	25.56	0217774	28.41	25.56
1-1/4"	1/2"	1-1/4"	2-3/4"	0217964	38.01	34.22	0217966	38.01	34.22	0217968	38.01	34.22	0217958	38.01	34.22	0217962	38.01	34.22
2"	3/4"	1-1/4"	3-1/4"	0217860	55.48	49.94	0217862	55.48	49.94	0217864	55.48	49.94	0217854	55.48	49.94	0217858	55.48	49.94
3/8"	1/4"	7/8"	1-3/4"	0217764	95.16	85.64	0217766	95.16	85.64	0217768	95.16	85.64	0217758	95.16	85.64	0217762	95.16	85.64
1-3/4"	3/4"	1-1/4"	3"	0217848	186.31	167.68	0217850	186.31	167.68	0217852	186.31	167.68	0217842	186.31	167.68	0217846	186.31	167.68
3/4"	1/2"	1-1/4"	2-5/8"	0217836	252.25	227.02	0217838	252.25	227.02	0217840	252.25	227.02	0217830	252.25	227.02	0217834	252.25	227.02
5/8"	3/8"	1"	2-1/4"	0217884	322.01	289.81	0217886	322.01	289.81	0217888	322.01	289.81	0217878	322.01	289.81	0217882	322.01	289.81
1"	1/2"	1-1/4"	2-3/4"	0217824	450.72	405.65	0217826	450.72	405.65	0217828	450.72	405.65	0217818	450.72	405.65	0217822	450.72	405.65

12821



6 Flute Chatterless Countersinks

High Speed Steel

- For greater material removal per revolution



Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Shank Length (LS)	Overall Length (OAL)	60 Degrees			82 Degrees			90 Degrees			100 Degrees			120 Degrees		
				Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
1/8"	1/8"	-	1-1/4"	0217970	17.53	15.78	0218007	17.53	15.78	0218044	17.53	15.78	0218081	17.53	15.78	0218155	17.53	15.78
3/16"	3/16"	-	1-3/8"	0217972	19.14	17.22	0218009	19.14	17.22	0218046	19.14	17.22	0218083	19.14	17.22	0218157	19.14	17.22
1/4"	1/4"	7/8"	1-1/2"	0217974	19.46	17.51	0218011	19.46	17.51	0218048	19.46	17.51	0218085	19.46	17.51	0218159	19.46	17.51
5/16"	1/4"	7/8"	1-3/4"	0217976	23.03	20.73	0218013	23.03	20.73	0218050	23.03	20.73	0218087	23.03	20.73	0218161	23.03	20.73
3/8"	1/4"	7/8"	1-3/4"	0217978	24.04	21.63	0218015	24.04	21.63	0218052	24.04	21.63	0218089	24.04	21.63	0218163	24.04	21.63
1/2"	1/4"	1"	2"	0217980	29.53	26.57	0218017	29.53	26.57	0218054	29.53	26.57	0218091	29.53	26.57	0218165	29.53	26.57
1/2"	3/8"	1"	2"	0217982	29.53	26.57	0218019	29.53	26.57	0218056	29.53	26.57	0218093	29.53	26.57	0218167	29.53	26.57
5/8"	1/4"	1"	2-1/4"	0217984	42.84	38.56	0218021	42.84	38.56	0218058	42.84	38.56	0218095	42.84	38.56	0218169	42.84	38.56
5/8"	3/8"	1"	2-1/4"	0217986	42.84	38.56	0218023	42.84	38.56	0218060	42.84	38.56	0218097	42.84	38.56	0218171	42.84	38.56
3/4"	1/2"	1-1/4"	2-5/8"	0217988	58.77	52.89	0218025	58.77	52.89	0218062	58.77	52.89	0218099	58.77	52.89	0218173	58.77	52.89
7/8"	1/2"	1-1/4"	2-3/4"	0217990	83.15	74.83	0218027	83.15	74.83	0218064	83.15	74.83	0218101	83.15	74.83	0218175	83.15	74.83
1"	1/2"	1-1/4"	2-3/4"	0217992	92.48	83.23	0218029	92.48	83.23	0218066	92.48	83.23	0218103	92.48	83.23	0218177	92.48	83.23
1-1/4"	1/2"	1-1/4"	2-3/4"	0217994	141.86	127.68	0218031	141.86	127.68	0218068	141.86	127.68	0218105	141.86	127.68	0218179	141.86	127.68
1-1/2"	3/4"	1-1/4"	2-7/8"	0217996	203.29	182.97	0218033	203.29	182.97	0218070	203.29	182.97	0218107	203.29	182.97	0218181	203.29	182.97
1-3/4"	3/4"	1-1/4"	3"	0217998	270.41	243.38	0218035	270.41	243.38	0218072	270.41	243.38	0218109	270.41	243.38	0218183	270.41	243.38
2"	3/4"	1-1/4"	3-1/4"	0218000	343.83	309.44	0218037	343.83	309.44	0218074	343.83	309.44	0218111	343.83	309.44	0218185	343.83	309.44

12797

**POW R FEED M935**

Achieve faster cycle times and exceptional metal removal rates, all without clogging, while experiencing fewer tool changes thanks to the POW-R-FEED M935 end mill, exclusively from IMCO.

- Super-tough-grade carbide
- Reinforced cutting edges
- Superior balance, minimal chatter - variable helix and variable index
- Advanced AlTiSiN coating



Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Depth of Cut Maximum (APMX)	Overall Length (OAL)	SQ			0.01"			0.015"			0.03"		
				Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
1/8"	1/8"	1/4"	1-1/2"	874617A	47.99	38.44	874618A	70.36	56.36	9179945	69.15	55.38	9179946	70.36	56.36
1/8"	1/8"	1/2"	1-1/2"	9179947	60.00	48.06	874619A	81.55	65.32	874620A	80.81	64.72	874621A	81.55	65.32
0.156"	0.188"	5/16"	2"	874622A	75.61	60.56	9179952	97.06	77.74	874623A	96.32	77.15	9179954	97.06	77.74
0.156"	0.188"	9/16"	2"	874624A	82.03	65.70	874625A	103.49	82.89	874626A	102.75	82.31	874627A	103.49	82.89
0.188"	0.188"	5/16"	2"	874628A	64.37	51.56	9179960	86.30	69.12	9179961	85.11	68.17	9179962	86.30	69.12
0.188"	0.188"	9/16"	2"	874629A	66.63	53.37	874630A	90.34	72.37	874631A	89.03	71.32	9179970	90.34	72.37
0.188"	0.188"	3/4"	2-1/2"	874632A	90.75	72.69	874633A	111.40	89.24	874634A	110.11	88.20	874635A	111.40	89.24
0.219"	1/4"	3/8"	2"	874636A	105.25	84.31	874637A	128.72	103.10	874638A	127.46	102.09	-	-	-
0.219"	1/4"	3/4"	2-1/2"	874639A	110.52	88.52	9179979	133.98	107.32	874640A	132.71	106.30	-	-	-
1/4"	1/4"	3/8"	2"	9179981	66.84	53.54	9179982	90.31	72.34	874641A	88.83	71.15	9179984	90.31	72.34
1/4"	1/4"	1/2"	2-1/2"	874642A	86.02	68.89	874643A	109.51	87.71	874644A	107.80	86.35	874645A	109.51	87.71
1/4"	1/4"	3/4"	2-1/2"	874647A	89.14	71.40	9179992	112.80	90.36	874648A	111.12	89.01	874649A	112.80	90.36
1/4"	1/4"	1"	3"	874650A	108.88	87.21	874651A	132.36	106.02	874652A	130.87	104.83	874653A	132.36	106.02
0.313"	0.313"	7/16"	2"	874655A	110.25	88.31	-	-	-	874656A	130.19	104.27	874657A	131.80	105.57
0.313"	0.313"	13/16"	2-1/2"	9180004	116.26	93.13	-	-	-	9180005	136.16	109.07	874658A	137.83	110.40
0.313"	0.313"	1-1/4"	3"	874660A	153.55	122.99	-	-	-	874661A	202.29	162.04	874662A	203.87	163.30
3/8"	3/8"	1/2"	2"	874664A	127.61	102.21	874665A	150.63	120.65	874666A	148.90	119.27	874667A	150.63	120.65
3/8"	3/8"	1"	2-1/2"	874670A	145.18	116.28	874671A	168.11	134.65	874672A	166.50	133.36	874673A	168.11	134.65
3/8"	3/8"	1-1/4"	3"	874677A	193.87	155.29	874678A	216.57	173.47	874679A	215.19	172.37	874680A	216.57	173.47
3/8"	3/8"	1-1/2"	3-1/2"	874683A	206.57	165.47	874684A	229.31	183.68	874685A	227.88	182.53	874686A	229.31	183.68
0.438"	0.438"	5/8"	2-1/2"	9180041	195.73	156.79	-	-	-	874689A	215.46	172.58	874690A	217.00	173.82
0.438"	0.438"	7/8"	2-3/4"	874691A	206.18	165.14	-	-	-	874692A	225.85	180.91	874693A	227.36	182.11
0.438"	0.438"	1-1/2"	3-1/2"	874740A	305.27	244.52	-	-	-	874695A	324.21	259.70	-	-	-
1/2"	1/2"	5/8"	2-1/2"	874696A	219.35	175.70	-	-	-	9180052	240.60	192.72	874698A	243.38	194.95
1/2"	1/2"	1"	3"	874701A	236.07	189.08	9180058	259.95	208.22	9180059	257.36	206.15	874523A	259.95	208.22
1/2"	1/2"	1-1/4"	3"	9180064	244.97	196.22	874704A	268.74	215.26	874705A	266.28	213.29	874706A	268.74	215.26
1/2"	1/2"	1-1/2"	3-1/2"	874710A	289.84	232.16	874711A	313.04	250.74	874712A	310.37	248.60	874713A	313.04	250.74
1/2"	1/2"	1-3/4"	4"	9180080	298.62	239.19	9180081	321.83	257.78	9180082	319.19	255.67	9180083	321.83	257.78
1/2"	1/2"	2"	4"	874716A	312.97	250.68	874717A	335.94	269.09	9180089	333.48	267.12	874718A	335.94	269.09
5/8"	5/8"	3/4"	3"	874722A	374.14	299.68	-	-	-	874723A	422.35	338.31	9180097	426.19	341.38
5/8"	5/8"	1-1/4"	3-1/2"	874726A	381.93	305.93	-	-	-	874727A	430.18	344.57	9180102	433.76	347.44
5/8"	5/8"	1-5/8"	3-1/2"	874730A	391.58	313.66	-	-	-	874731A	439.43	351.99	874732A	443.32	355.10
5/8"	5/8"	2-3/16"	4"	874735A	521.92	418.05	-	-	-	874736A	541.30	433.58	874737A	544.91	436.48
3/4"	3/4"	1"	3"	874786A	675.84	541.34	-	-	-	874739A	701.41	561.83	874787A	706.71	566.08
3/4"	3/4"	1-1/4"	4"	874744A	684.42	548.21	-	-	-	874788A	710.00	568.71	874745A	714.29	572.15
3/4"	3/4"	1-5/8"	4"	874751A	698.78	559.72	-	-	-	874752A	722.85	579.00	874753A	727.15	582.44
3/4"	3/4"	2-1/4"	5"	874757A	835.93	669.58	-	-	-	9180142	857.84	687.12	874758A	861.76	690.27
3/4"	3/4"	2-3/4"	5"	874764A	854.45	684.42	-	-	-	9180150	876.05	701.72	874765A	880.68	705.43
1"	1"	1-5/8"	4"	874769A	1174.43	940.72	-	-	-	874770A	1196.33	958.26	9180157	1201.83	962.67
1"	1"	2"	4-1/2"	874774A	1228.32	983.88	-	-	-	874775A	1236.83	990.70	874776A	1242.19	994.99
1"	1"	2-5/8"	5"	874780A	1271.05	1018.11	-	-	-	874781A	1279.82	1025.14	9180169	1285.28	1029.52
1"	1"	3-1/4"	6"	874784A	1447.42	1159.38	-	-	-	-	-	-	9180174	1430.34	1145.70

CUTTING TOOLS



MUSCLE TO HUSTLE

Truly a "go-to" tool for a wide range of applications, enDURO end mills are the ultimate combination of strength and flexibility. A solid core, reinforced cutting edges, variable indexed flutes and an advanced coating all come together in the M525 and M527 series to create an "everyday" high-performance end mill that excels in both traditional and high-efficiency milling tool paths

				SQ			0.015"			0.03"			0.06"			0.12"		
Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Depth of Cut Maximum (APMX)	Overall Length (OAL)	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
1/8"	1/8"	1/4"	1-1/2"	0335808	45.71	36.61	0335809	65.84	52.74	0335810	65.84	52.74	-	-	-	-	-	-
1/8"	1/8"	1/2"	1-1/2"	0335812	57.15	45.78	0335813	76.94	61.63	0335814	76.94	61.63	-	-	-	-	-	-
1/8"	1/8"	3/4"	2-1/2"	0335816	76.57	61.33	0335817	96.28	77.11	0335818	96.28	77.11	-	-	-	-	-	-
0.188"	0.188"	5/16"	2"	0335820	61.28	49.08	0335821	81.06	64.93	0335822	81.06	64.93	-	-	-	-	-	-
0.188"	0.188"	9/16"	2"	0335824	63.45	50.82	0335825	84.78	67.91	0335826	84.78	67.91	-	-	-	-	-	-
0.188"	0.188"	3/4"	2-1/2"	0335828	86.44	69.23	0335829	104.86	83.99	0335830	104.86	83.99	-	-	-	-	-	-
1/4"	1/4"	3/4"	2-1/2"	0335856	84.88	67.98	0335857	105.83	84.77	0335858	105.83	84.77	0335859	110.78	88.73	-	-	-
1/4"	1/4"	3/8"	2"	0335832	63.66	50.99	0335833	84.60	67.76	0335834	84.60	67.76	0335835	89.57	71.75	-	-	-
1/4"	1/4"	1-1/8"	3"	0335862	103.71	83.08	0335863	124.64	99.83	0335864	124.64	99.83	0335865	129.58	103.80	-	-	-
0.313"	0.313"	1-1/4"	3"	0335880	146.23	117.12	0335881	192.65	154.32	0335882	192.65	154.32	0335883	197.48	158.19	-	-	-
0.313"	0.313"	2-1/8"	4"	0335886	241.02	193.06	0335887	261.34	209.33	0335888	261.34	209.33	0335889	266.14	213.18	-	-	-
0.313"	0.313"	7/16"	2"	0335868	105.00	84.11	0335869	124.00	99.32	0335870	124.00	99.32	0335871	128.84	103.21	-	-	-
0.313"	0.313"	13/16"	2-1/2"	0335874	110.73	88.69	0335875	129.71	103.89	0335876	129.71	103.89	0335877	134.47	107.72	-	-	-
3/8"	3/8"	1-5/8"	4"	0335964	212.65	170.32	0335965	232.96	186.61	0335966	232.96	186.61	0335967	237.80	190.48	0335969	257.59	206.33
3/8"	3/8"	1-5/8"	3-1/2"	0335956	196.74	157.58	0335957	217.01	173.82	0335958	217.01	173.82	0335959	221.84	177.70	0335961	241.63	193.54
3/8"	3/8"	1-1/4"	3"	0335948	184.65	147.90	0335949	204.93	164.15	0335950	204.93	164.15	0335951	209.76	168.01	0335953	229.57	183.89
3/8"	3/8"	1/2"	2"	0335892	121.52	97.34	0335893	141.82	113.60	0335894	141.82	113.60	0335895	146.65	117.46	0335897	166.46	133.34
3/8"	3/8"	2"	4"	-	-	-	0335981	249.23	199.63	0335982	249.23	199.63	0335983	254.07	203.52	0335985	273.91	219.41
3/8"	3/8"	1"	2-1/2"	0335940	138.28	110.75	0335941	158.58	127.02	0335942	158.58	127.02	0335943	163.41	130.89	0335945	183.19	146.73
0.438"	0.438"	2"	4"	0336012	290.74	232.88	0336013	308.77	247.32	0336014	308.77	247.32	-	-	-	-	-	-
0.438"	0.438"	5/8"	2-1/2"	0335996	186.44	149.34	0335997	205.18	164.35	0335998	205.18	164.35	-	-	-	-	-	-
0.438"	0.438"	1"	2-3/4"	0336004	196.35	157.28	0336005	215.10	172.30	0336006	215.10	172.30	-	-	-	-	-	-
1/2"	1/2"	5/8"	2-1/2"	0336020	208.91	167.34	0336021	229.15	183.55	0336022	229.15	183.55	0336023	233.98	187.42	0336025	253.81	203.29
1/2"	1/2"	1"	3"	0336065	224.83	180.08	-	-	-	0336067	245.10	196.32	0336068	249.94	200.20	0336070	269.71	216.03
1/2"	1/2"	3-1/4"	6"	0336119	448.66	359.38	0336120	468.93	375.61	0336121	468.93	375.61	0336122	473.75	379.47	0336124	493.56	395.33
1/2"	1/2"	2-5/8"	5"	0336110	398.83	319.47	0336111	418.38	335.12	0336112	418.38	335.12	0336113	423.02	338.84	0336115	442.12	354.14
1/2"	1/2"	2-1/8"	4"	0336101	298.06	238.74	0336102	317.58	254.38	0336103	317.58	254.38	0336104	322.27	258.13	-	-	-
1/2"	1/2"	1-1/4"	3"	0336074	233.32	186.89	0336075	253.60	203.13	0336076	253.60	203.13	0336077	258.45	207.02	0336079	278.21	222.84
1/2"	1/2"	1-5/8"	4"	0336083	284.41	227.81	0336084	303.97	243.47	0336085	303.97	243.47	0336086	308.62	247.20	0336088	327.73	262.51
1/2"	1/2"	1-5/8"	6"	0336092	393.19	314.94	0336093	413.53	331.24	0336094	413.53	331.24	0336095	418.28	335.03	0336097	438.12	350.92
5/8"	5/8"	2-1/8"	6"	0336188	658.31	527.31	0336189	677.98	543.06	0336190	677.98	543.06	0336191	682.63	546.78	0336193	701.86	562.20
5/8"	5/8"	4"	6"	0336218	746.31	597.80	0336219	766.02	613.59	0336220	766.02	613.59	0336221	770.67	617.30	0336223	789.91	632.72
5/8"	5/8"	2-5/8"	5"	0336198	589.79	472.43	0336199	608.01	487.02	0336200	608.01	487.02	0336201	612.40	490.53	0336203	630.20	504.78
5/8"	5/8"	2-1/8"	4"	0336178	497.07	398.16	0336179	515.52	412.93	0336180	515.52	412.93	0336181	519.93	416.47	0336183	537.98	430.92
5/8"	5/8"	3/4"	3"	0336128	363.76	291.37	0336129	415.02	332.43	0336130	415.02	332.43	0336131	423.65	339.35	0336133	440.54	352.87
5/8"	5/8"	3-1/4"	6"	0336208	682.99	547.08	0336209	716.94	574.27	0336210	716.94	574.27	0336211	721.59	577.99	0336213	740.82	593.40
5/8"	5/8"	1-5/8"	3-1/2"	0336168	369.40	295.89	0336169	414.95	332.37	0336170	414.95	332.37	0336171	423.60	339.30	0336173	440.45	352.80
3/4"	3/4"	1-5/8"	4"	0336268	647.68	518.80	0336269	670.63	537.18	0336270	670.63	537.18	0336271	675.26	540.89	0336273	694.41	556.22
3/4"	3/4"	1"	3"	0336228	643.64	515.55	0336229	668.01	535.08	0336230	668.01	535.08	0336231	673.05	539.11	0336233	693.83	555.76
3/4"	3/4"	2-3/8"	5"	0336278	796.11	637.69	0336279	816.96	654.39	0336280	816.96	654.39	0336281	821.93	658.36	0336283	842.24	674.63
3/4"	3/4"	4-1/8"	7"	0336308	1120.24	897.32	0336309	1132.80	907.37	0336310	1132.80	907.37	0336311	1137.72	911.32	0336313	1157.91	927.49
3/4"	3/4"	3-1/4"	6"	0336298	956.63	766.26	0336299	972.72	779.14	0336300	972.72	779.14	0336301	977.66	783.10	0336303	997.88	799.30
3/4"	3/4"	2-3/8"	6"	0336288	926.16	741.85	0336289	947.30	758.79	0336290	947.30	758.79	0336291	952.24	762.75	0336293	972.83	779.24
1"	1"	2-5/8"	5"	0336373	1210.51	969.61	0336374	1201.06	962.05	0336375	1201.06	962.05	0336376	1205.88	965.90	0336378	1225.46	981.60
1"	1"	3-1/4"	6"	0336384	1378.47	1104.15	0336385	1362.23	1091.15	0336386	1362.23	1091.15	0336387	1367.07	1095.02	0336389	1386.83	1110.84
1"	1"	1-3/4"	4"	0336362	1118.49	895.90	0336363	1139.36	912.63	0336364	1139.36	912.63	0336365	1144.28	916.57	0336367	1164.67	932.90
1"	1"	4-1/4"	7"	0336395	1531.53	1226.75	0336396	1511.19	1210.47	0336397	1511.19	1210.47	0336398	1516.00	1214.32	0336400	1535.84	1230.21



Replacement Blades - Style B



Blade Type	Work Direction	Hand Operation	Blade Material	Order No.	Regular Price	SALE
B10C	Clockwise	Right Hand	Carbide	0558492	13.90	9.45
B10P	Clockwise	Right Hand	High Speed Steel TiN Coated	0558495	5.92	3.85
B10	Clockwise	Right Hand	High Speed Steel	0558489	3.50	2.28
B11	Clockwise	Right Hand	High Speed Steel	0558497	3.07	1.99
B12	Clockwise	Right Hand	High Speed Steel	0558498	2.97	1.93
B25	Clockwise	Right Hand	High Speed Steel	0558503	3.35	2.17
B30	Clockwise	Right Hand	High Speed Steel	0558505	4.17	2.72
B50	Clockwise	Right Hand	High Speed Steel Carbide Tipped	0558509	10.08	6.86
B60	Clockwise	Right Hand	High Speed Steel	0558510	6.47	4.20
B20C	Clockwise & Counter-Clockwise	Right Hand	Carbide	0558501	13.90	9.45
B20P	Clockwise & Counter-Clockwise	Right Hand	High Speed Steel TiN Coated	0558502	5.82	4.07
B20	Clockwise & Counter-Clockwise	Right Hand	High Speed Steel	0558500	3.86	2.51
B32	Clockwise & Counter-Clockwise	Right Hand	High Speed Steel	0558507	4.61	3.00
B70	Straight	Right Hand	High Speed Steel Carbide Tipped	0558511	15.16	10.30

6237



Set B - Deburring Sets

The Workhorse

- Popular set for holes, slots & edges
- Supports all B blades
- Blades can be inserted axially or perpendicular to holder
- Deburrs steel, aluminum copper, brass, cast iron and plastics



Type	Application	Included	Order No.	Regular Price	SALE
B Set Standard Deburring Kit	Steel, Aluminum, Brass, Cast Iron, Plastics	Aluminum Handle / B10, B20 Blades	0558472	36.74	25.61
B Set Standard Deburring Kit	Steel, Aluminum, Brass, Cast Iron, Plastics	Plastic Handle / B10, B20 Blades	0558471	27.44	19.12
Set B with Mango II Handle	Steel, Aluminum, Brass, Cast Iron, Plastics	Mango II Handle / B10, B20	0558487	28.91	20.15

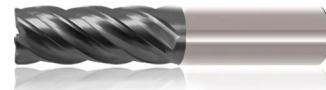
6243



NEW Precision Cutting Tools Ti5 Series

BE DYNAMIC & EFFICIENT IN MILLING OF TITANIUM AND INCONEL

- New LXN Design, Proprietary PCT technology proven in High-Efficiency Milling
- Multi-flute variable pitch helps reduce harmonics and increase metal removal rates
- Improved with our X60 Carbide grade. Offers maximum protection against edge chipping which ensures consistent performance
- Coated with our New Cut-Tron coating. Offers excellent heat and abrasive wear resistance. Its unique hot hardness and oxidation resistance make it the perfect choice in High-Performance milling



							0.015"			0.03"			0.06"			1/8"		
Cutting Diameter (DC)	Connection Diameter Machine Side (DCONMS)	Depth of Cut Maximum (APMX)	Overall Length (OAL)	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
1/4"	1/4"	3/4"	2-1/2"	9595582	71.32	63.97	9595599	79.23	71.06	9595607	79.23	71.06	-			-		
1/4"	1/4"	1"	3"	9595583	93.45	83.82	9595600	103.85	93.16	9595608	103.85	93.16	-			-		
3/8"	3/8"	7/8"	2-1/2"	9595584	108.47	97.30	9595601	120.55	108.14	9595609	120.55	108.14	-			-		
3/8"	3/8"	1"	3"	9595585	133.64	119.88	9595602	148.50	133.20	9595610	148.50	133.20	-			-		
3/8"	3/8"	1-1/2"	4"	9595586	163.84	146.97	9595603	182.06	163.31	9595611	182.06	163.31	-			-		
1/2"	1/2"	1-1/4"	3"	9595587	163.86	146.97	9595604	182.07	163.31	9595612	182.07	163.31	9595624	182.07	163.31	-		
1/2"	1/2"	1-5/8"	4"	9595588	247.21	221.75	9595605	253.89	227.74	9595613	253.89	227.74	9595625	253.89	227.74	-		
1/2"	1/2"	2"	4"	9595589	233.00	209.01	9595606	258.87	232.20	9595614	258.87	232.20	9595626	258.87	232.20	-		
5/8"	5/8"	1-5/8"	3-1/2"	9595590	321.79	288.65	-			9595615	357.56	320.73	9595627	357.56	320.73	-		
5/8"	5/8"	2"	4"	9595591	321.79	288.65	-			9595616	357.56	320.73	9595628	357.56	320.73	-		
5/8"	5/8"	2-1/2"	5"	9595592	392.32	351.92	-			9595617	435.93	391.03	9595629	435.93	391.03	-		
3/4"	3/4"	1-5/8"	4"	9595593	385.53	345.83	-			9595618	428.34	384.23	9595630	428.34	384.23	9595636	428.34	384.23
3/4"	3/4"	2-1/4"	5"	9595594	446.08	400.13	-			9595619	495.64	444.58	9595631	495.64	444.58	9595637	495.64	444.58
3/4"	3/4"	3-1/4"	6"	9595595	498.26	446.94	-			9595620	553.63	496.61	9595632	553.63	496.61	9595638	553.63	496.61
1"	1"	2"	4-1/2"	9595596	609.42	546.64	-			9595621	677.15	607.40	9595633	677.15	607.40	9595639	677.15	607.40
1"	1"	2-1/4"	5"	9595597	694.55	623.01	-			9595622	740.95	664.64	9595634	740.95	664.64	9595640	740.95	664.64
1"	1"	3-1/4"	6"	9595598	773.11	693.48	-			9595623	859.01	770.53	9595635	859.01	770.53	9595641	859.01	770.53

61326

ABRASIVES



Aluminum Oxide Shop Rolls Metalite

- Fast aggressive cuts and long life duration
- Strong, durable backing conforms to various shapes
- Added strength for coarse grit applications
- K224 - 50 & 60 Grit
- K225 - All other grits



Backing Weight - X						
Width	Length	Grit	Backing Material	Order No.	Regular Price	SALE
1"	50 yard	P50	Cotton	0990969	119.87	88.94
1"	50 yard	P60	Cotton	0990970	112.17	83.23
1-1/2"	50 yard	P50	Cotton	0990971	167.81	124.52
1-1/2"	50 yard	P60	Cotton	0990972	156.62	116.21
2"	50 yard	P50	Cotton	0991032	213.49	158.42
2"	50 yard	P60	Cotton	0991033	199.34	147.91

Backing Weight - J						
Width	Length	Grit	Backing Material	Order No.	Regular Price	SALE
1"	50 yard	P80	Cotton	0990957	95.15	70.61
1"	50 yard	P100	Cotton	0990956	91.84	68.15
1"	50 yard	P120	Cotton	0990955	91.84	68.15
1"	50 yard	P150	Cotton	0990954	91.84	68.15
1"	50 yard	P180	Cotton	0990953	91.84	68.15
1"	50 yard	P220	Cotton	0990952	91.84	68.15
1"	50 yard	P240	Cotton	0990951	91.84	68.15
1"	50 yard	P280	Cotton	0990950	91.84	68.15
1"	50 yard	P320	Cotton	0990949	91.84	68.15
1"	50 yard	P400	Cotton	0990948	91.84	68.15
1-1/2"	50 yard	P80	Cotton	0990968	133.04	98.71
1-1/2"	50 yard	P100	Cotton	0990967	128.72	95.51
1-1/2"	50 yard	P120	Cotton	0990966	128.72	95.51
1-1/2"	50 yard	P150	Cotton	0990965	128.72	95.51
1-1/2"	50 yard	P180	Cotton	0990964	128.72	95.51
1-1/2"	50 yard	P220	Cotton	0990963	128.72	95.51
1-1/2"	50 yard	P240	Cotton	0990962	128.72	95.51
1-1/2"	50 yard	P280	Cotton	0990961	128.72	95.51
1-1/2"	50 yard	P320	Cotton	0990960	128.72	95.51
1-1/2"	50 yard	P400	Cotton	0990959	128.72	95.51
2"	50 yard	P80	Cotton	0991031	169.27	125.61
2"	50 yard	P100	Cotton	0991030	163.60	121.39
2"	50 yard	P120	Cotton	0991029	163.60	121.39
2"	50 yard	P150	Cotton	0991028	163.60	121.39
2"	50 yard	P180	Cotton	0991027	163.60	121.39
2"	50 yard	P220	Cotton	0991026	163.60	121.39
2"	50 yard	P240	Cotton	0991025	163.60	121.39
2"	50 yard	P280	Cotton	0991024	163.60	121.39
2"	50 yard	P320	Cotton	0991023	163.60	121.39
2"	50 yard	P400	Cotton	0991022	163.60	121.39

3M Utility Cloth Rolls

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



Width	Length	Grit	Backing Weight	Order No.	Regular Price	SALE
1"	50 yard	50	X	1246267	84.83	79.83
1"	50 yard	60	X	1246266	79.24	74.56
1"	50 yard	80	J	1246265	66.93	62.98
1"	50 yard	120	J	1246263	64.74	60.92
1"	50 yard	150	J	1246262	64.74	60.92
1"	50 yard	180	J	1246261	64.74	60.92
1"	50 yard	220	J	1246260	64.74	60.92
1"	50 yard	240	J	1246259	64.74	60.92
1"	50 yard	280	J	1246258	64.74	60.92
1"	50 yard	400	J	1246256	64.74	60.92
1 1/2"	50 yard	50	X	1246286	118.30	111.32
1 1/2"	50 yard	80	J	1246284	93.74	88.21
1 1/2"	50 yard	120	J	1246282	90.38	85.05
1 1/2"	50 yard	150	J	1246281	90.38	85.05
1 1/2"	50 yard	180	J	1246280	90.38	85.05
1 1/2"	50 yard	220	J	1246279	90.38	85.05
1 1/2"	50 yard	240	J	1246278	90.38	85.05
1 1/2"	50 yard	280	J	1246277	90.38	85.05
1 1/2"	50 yard	400	J	1246275	90.38	85.05
2"	50 yard	50	X	1246298	152.89	143.87
2"	50 yard	60	X	1246297	143.99	135.49
2"	50 yard	80	J	1246296	120.54	113.43
2"	50 yard	100	J	1246295	115.01	108.22
2"	50 yard	120	J	1246294	115.01	108.22
2"	50 yard	150	J	1246293	115.01	108.22
2"	50 yard	180	J	1246292	115.01	108.22
2"	50 yard	220	J	1246291	115.01	108.22
2"	50 yard	240	J	1246290	115.01	108.22
2"	50 yard	280	J	1246289	115.01	108.22
2"	50 yard	320	J	1246288	115.01	108.22
2"	50 yard	400	J	1246287	115.01	108.22

443



Cones and Plugs

- For consistent, quality performance in foundries, welding shops, and fabrication facilities
- Strong performance on all steel, steel alloys, and irons
- Typical applications include hard-to-reach areas inside castings, removing flaws and cracks, and removing metal in corners



16, Aluminum Oxide						
Diameter	Arbor Hole Thread Size	Maximum RPM	Specification	Standard Pack	Order No.	Regular Price SALE
1-1/2"	3/8"-24	24,190	57A24-R	10	0995121	24.79 18.49
2"	5/8"-11	18,145	57A24-R	10	0995119	29.57 22.06

18, Aluminum Oxide						
Diameter	Arbor Hole Thread Size	Maximum RPM	Specification	Standard Pack	Order No.	Regular Price SALE
1-1/2"	5/8"-11	24,190	57A24-R	10	0995142	26.84 20.02
2"	5/8"-11	18,145	57A24-R	10	0995145	29.57 22.06

18R, Aluminum Oxide						
Diameter	Arbor Hole Thread Size	Maximum RPM	Specification	Standard Pack	Order No.	Regular Price SALE
2"	5/8"-11	18,145	57A24-R	10	0995146	27.50 20.52

1668

1373

**Contaminate-Free Thin Reinforced Cut-Off Wheels - Type 1 & Type 27**

- Contaminant-free: less than 0.1% Iron, Sulfur, or Chlorine
- Cuts both Steel and Stainless Steel



Type 1							
Diameter	Arbor Hole	Specification	Maximum RPM	Standard Pack	Order No.	Regular Price	SALE
4 1/2"	7/8"	A36-TBF	13300	25	0982963	4.19	3.14
5"	7/8"	WA36-TBF	12250	25	0983153	5.15	3.86
6"	7/8"	WA36-TBF	12700	25	0983154	5.68	4.26

Type 27							
Diameter	Arbor Hole	Specification	Maximum RPM	Standard Pack	Order No.	Regular Price	SALE
4 1/2"	7/8"	WA36-TBF	13300	25	0983546	4.73	3.55
5"	7/8"	WA36-TBF	12250	25	0983549	5.36	4.02
6"	7/8"	WA36-TBF	10200	25	0983559	5.82	4.37
7"	7/8"	WA36-TBF	8600	25	0983552	8.46	6.35

7293

**Reinforced Cut-Off Wheels For Hand Held Grinders**

- Ideal for cutting off ferrous metals, steel alloys, and cast iron
- Resinoid bond - long life - burn free cutting
- High strength reinforcement - resists breakage
- Priced each / sold in standard pack sizes (50)



Aluminum Oxide							
Diameter	Thickness	Arbor Hole	Specification	Maximum RPM	Order No.	Regular Price	SALE
1 1/2"	1/32"	1/4"	A60-RBF	45000	0983069	2.95	2.21
1 1/2"	1/16"	1/4"	A60-RBF	45000	0983070	2.95	2.21
2"	1/32"	3/8"	A60-RBF	30000	0983071	2.95	2.21
2"	1/16"	1/4"	A36-TBF	30000	0983582	2.95	2.21
2"	1/16"	3/8"	A36-RBF	30000	0983072	2.95	2.21
2"	1/8"	3/8"	A24-RBF	30000	0983073	3.23	2.42
3"	1/32"	1/4"	A60-RBF	25000	0982949	2.95	2.21
3"	1/32"	3/8"	A60-RBF	25000	0982950	2.95	2.21
3"	1/16"	1/4"	A60-RBF	25000	0983588	2.98	2.24
3"	1/16"	1/4"	A36-RBF	25000	0982951	2.98	2.24
3"	1/16"	3/8"	A60-RBF	25000	0983589	2.98	2.24
3"	1/16"	3/8"	A36-RBF	25000	0982952	2.98	2.24
3"	1/8"	1/4"	A24-RBF	25000	0982953	3.42	2.57
3"	1/8"	3/8"	A24-RBF	25000	0982954	3.42	2.57
4"	1/32"	1/4"	A60-RBF	19100	0982955	3.81	2.86
4"	1/32"	3/8"	A60-RBF	19100	0982956	3.81	2.86
4"	1/16"	1/4"	A60-RBF	19100	0983591	4.19	3.14
4"	1/16"	1/4"	A36-RBF	19100	0982957	4.19	3.14
4"	1/16"	3/8"	A60-RBF	19100	0983590	4.19	3.14
4"	1/16"	3/8"	A36-RBF	19100	0982958	4.19	3.14
4"	1/16"	5/8"	A36-RBF	19100	0982959	4.19	3.14
4"	1/8"	1/4"	A24-RBF	19100	0982960	4.69	3.52
4"	1/8"	3/8"	A24-RBF	19100	0982961	4.69	3.52

499

**Quickie Cut™ Extra Thin Reinforced Cut-Off Wheels - Type 1**

- Ultra-thin reinforced Type 1 design for fast, precise cutting with minimal material loss
- Reinforced construction improves durability and resistance to breakage
- Designed for cutting Steel and Stainless Steel
- Available in various thicknesses for speed or extended wheel life



Diameter	Thickness	Arbor Hole	Specification	Maximum RPM	Standard Pack	Order No.	Regular Price	SALE
4 1/2"	.035"	7/8"	A60-TB Flex	13300	25	0983553	3.70	2.78
4 1/2"	.045"	7/8"	A36-TBF	13300	25	0982962	3.72	2.79
4"	.040"	5/8"	A60-TB Flex	19000	25	0983557	3.77	2.83
5"	.040"	7/8"	A60-TB Flex	12250	25	0983554	4.27	3.20
5"	.045"	7/8"	A36-TBF	12250	25	0982964	4.37	3.28
6"	.040"	7/8"	A60-TB Flex	10200	25	0983555	4.76	3.57
6"	.045"	7/8"	A36-TBF	10200	25	0982965	4.73	3.55
7"	.040"	7/8"	A60-TB Flex	8600	25	0983556	7.57	5.68
7"	.045"	7/8"	A36-TBF	8600	25	0982966	7.46	5.60

7785

**Ceramic Alumina Combo Wheels**

- Self-sharpening grain delivers a superior combination of life and cut rate
- Ideal for Stainless Steel and other hard-to-cut metals
- Type 27 cutoff wheel

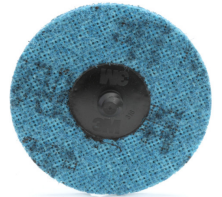


			7/8"			5/8"-11		
Diameter	Grit	Maximum RPM	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
4 1/2"	30	13,000	0999941	19.03	13.34	0999942	24.78	17.37
5"	30	12,200	0999943	22.22	15.57	0999944	28.55	20.01
6"	30	10,200	0999945	27.51	19.28	0999946	34.90	24.47
7"	30	8,500	0999947	39.97	28.01	0999948	46.52	32.61
9"	30	6,600	0999949	53.94	37.81	0999950	59.00	41.36

1506

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
- Priced each / sold in standard pack sizes



Diameter	Maximum RPM	Grade	Color	Order No.	Regular Price	SALE
1"	30,000	Very Fine	Teal	1248123	1.81	1.62
1"	30,000	Medium	Maroon	1248124	1.81	1.62
1-1/2"	30,000	Very Fine	Teal	1248055	1.90	1.71
1-1/2"	30,000	Medium	Maroon	1248054	1.90	1.71
1-1/2"	30,000	Coarse	Brown	1248053	1.90	1.71
2"	25,000	Very Fine	Teal	1248021	2.76	2.49
2"	25,000	Medium	Maroon	1248022	2.76	2.49
2"	25,000	Medium	Maroon	1248323	2.80	2.53
2"	25,000	Coarse	Brown	1248023	2.76	2.49
3"	18,000	Very Fine	Teal	1248025	5.10	4.59
3"	18,000	Medium	Maroon	1248026	5.10	4.59
3"	18,000	Coarse	Brown	1248027	5.10	4.59
4"	12,000	Coarse	Brown	1249461	7.42	6.71

61333

ABRASIVES

3M Scotch-Brite™ Convolute Wheels

Scotch-Brite™ EXL Deburring Wheels

- Use to clean, finish, blend, deburr, or polish all types of metals, composites, and glass



Diameter	Face Width	Center Hole Size	Maximum RPM	Grade	Order No.	Regular Price	SALE
6"	1/2"	1"	6,000	Fine	1249370	117.22	106.67
6"	1/2"	1"	6,000	Fine	1249438	117.22	106.67
6"	1/2"	1"	6,000	Medium	1249519	117.22	106.67
6"	1"	1"	6,000	Fine	1249296	164.05	149.29
6"	1"	1"	6,000	Fine	1249439	164.05	149.29
6"	1"	1"	6,000	Medium	1249520	164.05	149.29
8"	1/2"	3"	4,500	Fine	1249371	139.41	126.86
8"	1/2"	3"	4,500	Fine	1249605	139.41	126.86
8"	1/2"	3"	4,500	Medium	1249813	139.41	126.86
8"	1"	3"	4,500	Fine	1249298	205.18	186.71
8"	1"	3"	4,500	Fine	1249441	205.18	186.71
8"	1"	3"	4,500	Medium	1249522	205.18	186.71
8"	2"	3"	4,500	Fine	1249299	357.78	325.58
8"	2"	3"	4,500	Fine	1249442	357.81	325.61
8"	2"	3"	4,500	Medium	1249523	357.81	325.61

6569

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

- Cuts quickly, grinds easily, and finishes work surfaces
- Contaminant-free: less than 0.1% Iron, Sulfur, or Chlorine
- Fiberglass net reinforcement provides added strength and flexibility
- Ideal for Stainless Steel and a wide range of metals, including cutting metal profiles and thin pipes, and removing weld slag
- Use instead of a flap disc to complete the job with an excellent finish



Diameter	Arbor Hole	Width	Grit	Maximum RPM	Order No.	Regular Price	SALE
4 1/2"	7/8"	3/32"	36	13,300	0983600	4.44	3.33
4 1/2"	5/8"-11	3/32"	36	13,300	0983601	8.50	6.38
5"	7/8"	3/32"	36	12,250	0983602	5.36	4.02
5"	5/8"-11	3/32"	36	12,250	0983603	9.63	7.22
6"	7/8"	3/32"	36	10,200	0983604	7.92	5.94
6"	5/8"-11	3/32"	36	10,200	0983605	12.01	9.01

483

3M 6" x 9" Scotch-Brite™ 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 only



Width	Length	Abrasive Material	Order No.	Regular Price	SALE
3 1/2"	4 1/2"	Aluminum Oxide	1248598	7.14	6.86
3 2/3"	9 1/4"	Aluminum Oxide	1248972	4.12	3.96
6"	9"	Aluminum Oxide	1248968	2.81	2.70
6"	9"	Aluminum Oxide	1248969	9.13	8.77
6"	9"	Aluminum Oxide	1248766	275.86	265.10
6"	9"	Aluminum Oxide	1248973	7.57	7.27
6"	9"	Aluminum Oxide	1248606	2.81	2.70
6"	9"	Non Woven Abrasive	1248605	2.81	2.68
6"	9"	Non Woven Abrasive	1248975	5.10	4.90
6"	9"	Silicon Carbide	1248970	2.81	2.70

3274

NORTON General Purpose Diamond Dressing Tools



- Consistent diamond structure and shape for repeatable dressing performance
- Well-defined diamond point for precise truing and dressing
- Non-resettable BC and Phono single-point tools for low initial cost applications where resetting is not required
- Non-resettable indexable single-point tools with selected diamonds for durability and cost efficiency
- Specialty diamond tools for concave radii dressing in toolroom applications using controlled dressing mechanisms

Shank Diameter	Shank Length	Diamond Carat Size	Maximum Compatible Wheel Diameter	Model No	Order No.	Regular Price	SALE
3/8"	2"	1/4"	7"	BC2M6	0993081	133.43	99.54
3/8"	2"	1/3"	10"	BC3M6	0993083	148.26	110.60
3/8"	2"	1/2"	14"	BC5M6	0993085	176.64	131.77
3/8"	2"	3/4"	20"	BC7M6	0993087	267.76	199.75
3/8"	2"	1"	30"	BC10M6	0993071	382.66	285.46
7/16"	3/4"	1/2"	14"	BCUD5	0993082	133.43	99.54
7/16"	2"	1/4"	7"	BC2M7	0993084	148.26	110.60
7/16"	2"	1/3"	10"	BC3M7	0993070	483.20	360.47
7/16"	2"	1/2"	14"	BC5M7	0993086	176.64	131.77
7/16"	2"	3/4"	20"	BC7M7	0993088	267.76	199.75
7/16"	2"	1"	30"	BC10M7	0993072	382.66	285.46

1713

WEILER 1/4" Stem-Mounted End Brushes

- Removes rust, scale, and light burrs in confined areas
- Flexible wire for consistent contact in hard-to-reach spaces
- Maintains stability at high-speed die grinder operation
- Built for long service life in production use



Brush Diameter	Bristle Diameter	Trim Length	Maximum RPM	Stainless Steel			Steel		
				Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
1/2"	0.006"	7/8"	25,000	0998128	31.19	21.87	0998109	24.21	16.97
1/2"	0.0104"	7/8"	25,000	0998130	28.77	20.17	0998111	22.51	15.78
1/2"	0.014"	7/8"	25,000	0998131	27.47	19.25	0998112	21.34	14.95
1/2"	0.020"	7/8"	25,000	0998132	27.23	19.08	0998113	20.68	14.49
3/4"	0.006"	7/8"	22,000	0998133	45.19	31.68	0998114	37.32	26.17
3/4"	0.0104"	7/8"	22,000	0998135	40.64	28.49	0998116	28.36	19.88
3/4"	0.014"	7/8"	22,000	0998136	40.26	28.22	0998117	28.04	19.66
3/4"	0.020"	7/8"	22,000	0998137	39.09	27.40	0998118	27.05	18.96
1"	0.006"	7/8"	22,000	0998138	62.82	44.03	0998120	44.60	31.26
1"	0.0104"	7/8"	22,000	0998140	57.86	40.56	0998122	33.08	23.18
1"	0.014"	7/8"	22,000	0998142	57.54	40.33	0998124	33.08	23.18
1"	0.020"	7/8"	22,000	0998143	54.82	38.43	0998125	29.09	20.40

1450

SURF PRO 6" x 9" Non-Woven Hand Pads

- Excellent for hand finishing and cleaning of woods, metals, and composites
- Ideal for wood finishing, paint prep, and general cleaning
- Sold in standard pack sizes (20)



Width	Length	Grade	Color	Feature	Abrasive Material	Order No.	Regular Price	SALE
6"	9"	Ultra Fine	Light Gray	Cleaning	Silicon Carbide	1217637	2.32	1.75
6"	9"	Very Fine	Green	Scouring	Aluminum Oxide	1217635	2.09	1.57
6"	9"	Very Fine	Maroon	General Purpose	Aluminum Oxide	1217638	2.14	1.61
6"	9"	Medium	Tan	Heavy Duty	Aluminum Oxide	1217640	3.36	2.52

971



Norton Blaze R980 Flap Disc

- Fast cutting for material removal, weld blending, and deburring with reduced heat buildup
- Ceramic alumina grain for long life on Stainless Steel, Inconel, Titanium, and other hard alloys
- Durable Y weight polyester flaps with grinding aid for improved cut rate and heat resistance
- Flexible, trimmable backing plate for better control and surface conformity



Wheel Type	Diameter	Arbor Hole	Grit	Style	Order No.	Regular Price	SALE
Type 27	4-1/2"	5/8"-11	40	Straight on plastic pad (Merit TY27)	0989952	25.72	19.09
Type 27	4-1/2"	7/8"	40	Straight on plastic pad (Merit TY27)	0989948	20.87	15.48
Type 27	4-1/2"	5/8"-11	60	Straight on plastic pad (Merit TY27)	0989953	25.72	19.09
Type 27	4-1/2"	7/8"	60	Straight on plastic pad (Merit TY27)	0989949	20.87	15.48
Type 27	4-1/2"	5/8"	80	Straight on plastic pad (Merit TY27)	0989954	25.72	19.09
Type 27	4-1/2"	7/8"	80	Straight on plastic pad (Merit TY27)	0989950	20.87	15.48
Type 27	4-1/2"	5/8"-11	120	Straight on plastic pad (Merit TY27)	0989955	25.72	19.09
Type 27	4-1/2"	7/8"	120	Straight on plastic pad (Merit TY27)	0989951	20.87	15.48
Type 29	4-1/2"	5/8"-11	36	Tapered on fiberglass pad	0990031	25.72	19.09
Type 29	4-1/2"	5/8"-11	40	Tapered on fiberglass pad	0990032	25.72	19.09
Type 29	4-1/2"	7/8"	40	Tapered on fiberglass pad	0990029	20.87	15.48
Type 29	4-1/2"	5/8"-11	60	Tapered on fiberglass pad	0990033	25.72	19.09
Type 29	4-1/2"	5/8"	80	Tapered on fiberglass pad	0990034	25.72	19.09

1751



(PG S-Flex) Belts - R980 Y Weight Back

- Longer belt life lowers cost per unit
- Better grain adhesion - edge fray resistance
- More consistent grind throughout extended belt life
- Lasts 50% to 200% longer on Carbon Steel, Stainless Steel, Cobalt, Chrome, Inconel, and Titanium
- Cuts cooler and 20% faster than current generation belts
- Lowers total grinding cost
- Polyester backing material



Ceramic Alumina					
Width	Length	Grit	Order No.	Regular Price	SALE
1/2"	12"	80	0987704	5.81	4.31
1/2"	18"	80	0987707	6.14	4.56
1/2"	24"	80	0987710	6.38	4.74
3/4"	18"	80	0987713	6.59	4.89
3/4"	20-1/2"	80	0987716	6.95	5.16

Premium Ceramic Alumina					
Width	Length	Grit	Order No.	Regular Price	SALE
1/2"	12"	60	0987703	6.02	4.47
1/2"	12"	40	0987702	6.31	4.68
1/2"	18"	60	0987706	6.38	4.74
1/2"	18"	40	0987705	6.71	4.98
1/2"	24"	40	0987708	7.39	5.48
1/2"	24"	60	0987709	6.89	5.11
3/4"	18"	60	0987712	7.03	5.22
3/4"	18"	40	0987711	7.52	5.57
3/4"	20-1/2"	40	0987714	7.67	5.69
3/4"	20-1/2"	60	0987715	7.39	5.48

1695

3M PSA Discs 348D

- Aluminum Oxide - X weight cloth discs
- Heavy duty for more aggressive applications
- Provides excellent adhesion while removing easily



Type	Diameter	Grit	Maximum RPM	ManufacturerNo	Order No.	Regular Price	SALE
Cloth Discs	2"	50	15,000	7000118871	1242689	1.68	1.41
Cloth Discs	2"	60	15,000	7000118872	1242688	1.65	1.39
Cloth Discs	2"	80	15,000	7000118873	1242687	1.54	1.30
Cloth Discs	2"	P120	15,000	7000118875	1242685	1.46	1.23
Cloth Discs	3"	40	15,000	7000118878	1241927	1.99	1.68
Cloth Discs	3"	50	15,000	7000118879	1241926	1.92	1.62
Cloth Discs	3"	60	15,000	7000118880	1241924	1.78	1.51
Cloth Discs	3"	80	15,000	7000118881	1241922	1.76	1.50
Cloth Discs	3"	P100	15,000	7000118882	1241920	1.72	1.46
Cloth Discs	3"	P120	15,000	7000118883	1241918	1.72	1.46
Cloth Discs	5"	36	12,000	7100053622	1242681	2.95	2.49
Cloth Discs	5"	40	12,000	7000118907	1242680	2.81	2.38
Cloth Discs	5"	50	12,000	7010294666	1242678	2.67	2.25
Cloth Discs	5"	60	12,000	7000118905	1242676	2.53	2.14
Cloth Discs	5"	80	12,000	7100053536	1242675	2.42	2.04
Cloth Discs	5"	P100	12,000	7000148148	1242674	2.38	2.00
Cloth Discs	5"	P120	12,000	7100029967	1242673	2.38	2.00
Cloth Discs	5"	P150	12,000	7010326502	1242672	2.38	2.00
Cloth Discs	5"	P180	12,000	7100045948	1242671	2.38	2.00
Cloth Discs	5"	P240	12,000	7100053537	1242670	2.38	2.00
Cloth Discs	6"	50	12,000	7010360710	1242668	3.96	3.35
Cloth Discs	6"	60	10,000	7000118904	1242667	3.71	3.14
Cloth Discs	6"	80	10,000	7000118902	1242666	3.51	2.97
Cloth Discs	6"	P100	10,000	7010326520	1242665	3.32	2.81
Cloth Discs	6"	P120	10,000	7010361778	1242744	3.32	2.81
Cloth Discs	8"	36	7,000	7000118908	1242664	7.87	6.65
Cloth Discs	8"	40	7,000	7010361777	1242663	7.43	6.29
Cloth Discs	8"	60	12,000	7000118903	1242661	6.78	5.73
Cloth Discs	8"	80	7,000	7100041214	1242660	6.40	5.40
Cloth Discs	8"	P120	7,000	7010326519	1242658	6.13	5.18
Cloth Discs	12"	36	2,000	7000118898	1245749	18.26	15.43
Cloth Discs	12"	40	2,000	7010294665	1245748	17.22	14.55
Cloth Discs	12"	50	2,000	7000118897	1245747	16.24	13.72
Cloth Discs	12"	60	2,000	7000118896	1245746	15.30	12.94
Cloth Discs	12"	80	2,000	7000118895	1245745	14.39	12.17
Cloth Discs	12"	P100	2,000	7000118894	1245744	13.64	11.52
Cloth Discs	16"	36	3,600	7010360717	1245737	33.57	28.38
Cloth Discs	16"	60	12,000	7000118892	1245734	28.20	23.83
Cloth Discs	16"	80	12,000	7100058061	1245733	26.57	22.47
Cloth Discs	18"	36	2,000	7010360714	1245731	42.55	35.97
Cloth Discs	18"	60	2,000	7000118890	1245729	35.71	30.20
Cloth Discs	20"	36	7,500	7000118888	1245727	51.67	43.68
Cloth Discs	20"	40	7,500	7000118887	1245726	48.82	41.27
Cloth Discs	20"	50	7,500	7000118886	1245725	46.09	38.96
Cloth Discs	20"	60	7,500	7000118885	1245724	43.50	36.76
Cloth Discs	20"	80	7,500	7000118884	1245723	40.95	34.61
Cloth Discs	24"	36	3,000	7100096919	1242637	73.92	62.48
Cloth Discs	24"	40	1,800	7010360724	1242636	69.03	58.35
Cloth Discs	24"	80	3,000	7010326516	1242632	56.81	48.02

2736

ABRASIVES

3M Cubitron II Roloc Durable Edge Disc 984F

- Featuring durable edge backing - for longer edge retention
- The 984F disc series extends disc life via precision-shaped ceramic grains
- Quick change discs
- Features a flexible, durable cloth backing that stands up to aggressive grinding applications
- Optimized for: Stainless Steel, High Nickel Alloys, Superalloys, and Carbon Steel



Diameter	Grit	Maximum RPM	Attachment Type - TSM			Attachment Type - TR		
			Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
1-1/2"	36+	30,000	1243016	2.04	1.74	1243012	2.04	1.74
1-1/2"	60+	30,000	1243024	1.89	1.60	1243020	1.89	1.60
1-1/2"	80+	30,000	1243032	1.89	1.60	1243028	1.89	1.60
2"	36+	25,000	1243017	3.11	2.62	1243013	3.11	2.62
2"	60+	25,000	1243025	2.81	2.38	1243021	2.81	2.38
2"	80+	25,000	1243033	2.73	2.31	1243029	2.73	2.31
3"	36+	20,000	1243018	4.05	3.43	1243014	4.05	3.43
3"	60+	20,000	1243026	3.61	3.05	1243022	3.61	3.05
3"	80+	20,000	1243034	3.61	3.05	1243030	3.61	3.05
4"	36+	12,000	1243019	5.84	4.93	1243015	5.84	4.93
4"	60+	12,000	1243027	5.28	4.47	1243023	5.28	4.47
4"	80+	12,000	1243035	5.04	4.27	1243031	5.15	4.35

5902

3M 9" x 11" Wetordry™ Sheets 413Q

- Silicon Carbide mineral provides an aggressive cut and a consistent, fine finish
- Light, A weight paper backing
- Resin bonding resists deterioration from heat, extending the life of the abrasive cloth



Width	Length	Grit	Grade	Order No.	Regular Price	SALE
9"	11"	220	Very Fine	1245942	2.48	2.09
9"	11"	240	Very Fine	1245941	2.48	2.09
9"	11"	320	Extra Fine	1245939	2.48	2.09
9"	11"	400	Super Fine	1245937	2.48	2.09
9"	11"	500	Super Fine	1245936	2.48	2.09
9"	11"	600	Super Fine	1245935	2.48	2.09

501

NORTON 9" x 11" Abrasive Sheets

- Durable abrasive sheets deliver consistent cutting, blending, and finishing performance
- Flexible, tear-resistant backing for hand or machine sanding on metal, wood, and composites
- Uniform abrasive grain for fast cutting action and long service life across multiple grits



Garnet					
Grit	Grade	Sheets Per Package	Order No.	Regular Price	SALE
80	Coarse	50	0991407	1.99	1.48
100	Medium	100	0991406	1.89	1.41
120	Medium	100	0991405	1.89	1.41
150	Fine	100	0991404	1.89	1.41
180	Fine	100	0991403	1.89	1.41
220	Very Fine	100	0991402	1.89	1.41

Silicon Carbide					
Grit	Grade	Sheets Per Package	Order No.	Regular Price	SALE
P80	P80	25	0991384	16.27	12.14
P100	Medium	25	0991383	14.74	11.00
P120	Medium	25	0991382	11.52	8.59
P150	Fine	25	0991381	12.15	9.06
P180	Fine	25	0991380	10.28	7.67
180	Fine	50	0991385	3.43	2.56
P220	Very Fine	25	0991379	10.28	7.67
220	Very Fine	50	0991453	2.74	2.04
240	Very Fine	50	0991452	2.74	2.04
320	Fine	25	0991378	10.28	7.67
320	Fine	50	0991451	2.74	2.04
400	Super Fine	25	0991377	10.28	7.67
400	Super Fine	50	0991450	2.74	2.04
500	Ultra Fine	50	0991449	2.74	2.04
600	Ultra Fine	50	0991448	2.74	2.04

Aluminum Oxide					
Grit	Grade	Sheets Per Package	Order No.	Regular Price	SALE
P60	Coarse	25	0991413	4.64	3.46
P80	Coarse	25	0991426	3.95	2.95
P100	Medium	50	0991425	3.72	2.78
P120	Medium	50	0991424	3.72	2.78
P150	Fine	50	0991423	3.72	2.78
P180	Fine	50	0991422	3.72	2.78
P240	Very Fine	50	0991420	3.72	2.78
P320	Super Fine	50	0991418	3.72	2.78

1795

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

- Can be used wet or dry
- C weight = 60 - 180 grit
- A weight = 220 grit and finer



Grit	Order No.	Regular Price	SALE
60	1217600	1.30	0.91
120	1217606	1.23	0.86
180	1217610	0.90	0.63
220	1217612	0.90	0.63
240	1217614	0.90	0.63
320	1217617	0.90	0.63
400	1217620	0.90	0.63
600	1217622	0.90	0.63

10706

SURF PRO 9" x 11" Crocus Cloth Sheets

- Used to smooth and polish metal surfaces on shafts, bushings, etc

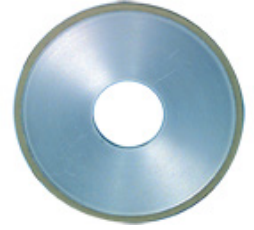


Order No.	Regular Price	SALE
1217592	2.18	1.53

10691

SURF PRO Diamond Straight Wheels

- Resin bond for grinding carbide - type 1A1
- 100 concentration - 1/8" diamond depth for aggressive action - long life
- 100 grit for chip breaker
- 120 grit for general purpose
- 150 grit for semi finish
- For wet or dry application

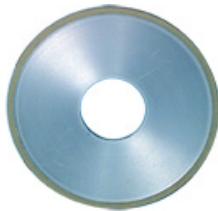


				120			150			100		
Diameter	Width	Arbor Hole	Thickness	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
4"	1/16"	1-1/4"	1/16"	1015105	281.88	211.41	1015106	351.57	263.68	1015104	282.88	212.17
4"	1/8"	1-1/4"	1/8"	1015114	313.64	235.23	1015111	285.01	213.77	1015113	313.64	235.23
4"	1/8"	1-1/4"	1/8"	1015110	300.44	225.33	1015115	311.11	233.34	1015109	293.92	220.44
5"	1/16"	1-1/4"	1/16"	-	-	-	1015119	262.95	197.22	1015117	354.98	266.24
5"	1/8"	1-1/4"	1/8"	1015121	291.97	218.97	1015124	319.82	239.86	1015120	293.57	220.18
5"	1/4"	1-1/4"	1/4"	1015123	345.87	259.41	1015122	288.97	216.73	-	-	-
6"	1/16"	1-1/4"	1/16"	1015130	286.71	215.03	1015131	286.71	215.03	1015129	290.21	217.66
6"	1/8"	1-1/4"	1/8"	1015150	377.99	283.49	1015135	323.06	242.30	1015148	377.99	283.49
6"	1/8"	1-1/4"	1/8"	1015133	324.34	243.25	1015147	464.11	348.08	-	-	-
6"	1/4"	1-1/4"	1/4"	1015138	300.37	225.27	1015140	300.37	225.27	1015136	300.37	225.27
6"	3/8"	1-1/4"	3/8"	1015144	464.11	348.08	1015152	377.99	283.49	1015142	439.15	329.36
7"	1/4"	1-1/4"	1/4"	1015157	396.41	297.30	1015158	396.80	297.60	1015155	397.05	297.79
7"	3/8"	1-1/4"	3/8"	-	-	-	1015163	464.11	348.08	1015153	344.85	258.64
7"	3/8"	1-1/4"	3/8"	1015160	464.11	348.08	1015171	583.30	437.47	-	-	-
7"	1/2"	1-1/4"	1/2"	1015170	583.30	437.47	1015154	345.00	258.75	1015168	582.46	436.84

10853

SURF PRO Diamond Cut-off Wheels

- Type 1A1R - Relieve center resin bond - 1/4" Diamond depth 100 concentration - Long life



		100			150		
Diameter	Arbor Hole	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
4"	1 1/4"	-	-	-	1015179	181.16	154.35
6"	1 1/4"	1015180	348.60	254.48	1015183	358.58	261.76
6"	1 1/4"	1015182	290.25	211.88	1015181	348.60	254.48

9132

WEILER Composite Metal Hub Wheels

- 50% higher filament density than traditional metal hub brushes - highest in marketplace
- Steel shell brushes provide increased accuracy and dimensional stability to ensure consistent, efficient performance with minimal vibration
- Produced with a 2" arbor hole, removing the need for adaptors and allowing direct mounting on various equipment



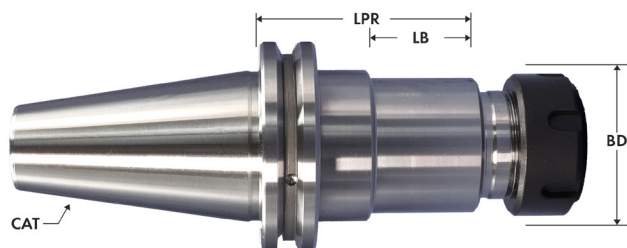
Diameter	Bristle Diameter	Width	Grit	Trim Length	Maximum RPM	Order No.	Regular Price	SALE
6"	0.055"	3/4"	80	1 1/2"	4,000	1000523	186.83	139.39
6"	0.026"	3/4"	120	1"	4,000	1000526	185.92	138.70
6"	0.043"	3/4"	120	1"	4,000	1000527	185.92	138.70
8"	0.026"	7/8"	120	2"	4,000	1000529	278.04	207.44
8"	0.043"	7/8"	120	2"	4,000	1000530	278.04	207.44
8"	0.055"	7/8"	120	2"	4,000	1000531	278.04	207.44
10"	0.055"	1 1/8"	80	2"	4,000	1000534	400.44	298.76
10"	0.026"	1 1/8"	120	2"	4,000	1000532	400.44	298.76
10"	0.043"	1 1/8"	120	2"	4,000	1000533	400.44	298.76

1503

ER Collet Chucks CAT40 & CAT50 V-Flange Shank



- Runout: .0001" on Clamping Length under 4"
- Runout: .0002" on Clamping Length over 5"
- Taper Shank Tolerance: AT3 or Better
- Balancing: G2.5 at 25,000 RPM
- Coolant: Form AD
- Central Coolant Through the Spindle



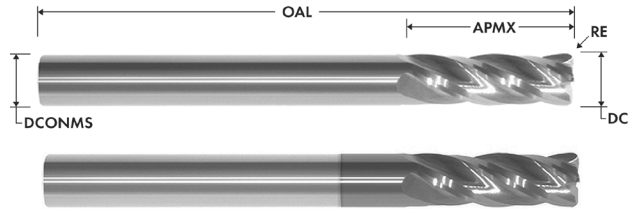
Connection Size (CSI)	Protruding Length (LPR)	Body Diameter (BD)	Body Length (LB)	CAT40			CAT50		
				Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
ER11	2-1/2"	0.748"	1.12"	741433A	180.71	126.50	-		
ER11	4"	0.748"	2.62"	741434A	187.05	130.94	-		
ER11	6"	0.748"	4.62"	741435A	237.82	166.47	-		
ER16	2-1/2"	1.26"	1.12"	741436A	127.12	88.98	-		
ER16	4"	1.26"	2.62"	741437A	144.26	100.98	741457A	247.34	173.14
ER16	5"	1.26"	3.62"	741438A	177.31	124.12	-	-	-
ER16	6"	1.26"	4.62"	741455A	241.93	205.65	741458A	325.47	227.84
ER16	8"	1.26"	6.62"	741439A	314.96	220.47	741456A	488.07	341.64
ER20	2-1/2"	1.378"	1.12"	741440A	127.12	88.98	-	-	-
ER20	4"	1.378"	2.62"	741441A	144.26	100.98	741460A	247.34	173.14
ER20	6"	1.378"	4.62"	741442A	241.93	169.36	741461A	325.47	227.84
ER20	8"	1.378"	6.62"	741443A	314.96	220.47	741459A	488.07	341.64
ER25	2-1/2"	1.653"	1.12"	741444A	127.12	88.98	-	-	-
ER25	4"	1.653"	2.62"	741445A	144.26	100.98	741463A	248.84	174.19
ER25	6"	1.653"	4.62"	741446A	241.93	169.36	741464A	325.47	227.84
ER25	8"	1.653"	6.62"	741447A	314.96	220.47	741462A	488.07	341.64
ER32	12"	1.968"	10.62"	-	-	-	741465A	855.92	599.14
ER32	2-3/4"	1.968"	1.21"	741448A	132.54	92.78	-	-	-
ER32	4"	1.968"	2.62"	741449A	162.29	113.60	741466A	286.41	200.49
ER32	6"	1.968"	4.62"	741450A	244.64	171.25	741467A	325.47	227.84
ER32	8"	1.968"	6.62"	741451A	314.96	220.47	741468A	488.07	341.64
ER40	3"	2.48"	1.04"	741452A	180.32	126.22	-	-	-
ER40	4"	2.48"	2.62"	-	-	-	741469A	301.74	211.22
ER40	6"	2.48"	4.62"	741453A	254.25	177.98	741470A	283.71	198.60
ER40	8"	2.48"	6.62"	741454A	321.87	225.32	741471A	488.07	341.64



Solid Carbide 4-Flute AlTiN

Single End Mills

- 4 Flute End Mills feature four cutting edges, providing increased tool strength and rigidity compared to tools with fewer flutes. The additional cutting edges allow higher feed rates per revolution while distributing cutting loads more evenly across the tool
- AlTiN (Aluminum Titanium Nitride) is an advanced PVD coating engineered to withstand high cutting temperatures and demanding machining conditions. The aluminum content forms a protective aluminum oxide layer during cutting, which acts as a thermal barrier and helps protect the cutting edge from heat and oxidation



								0.015"			0.06"			0.09"		
Cutting Diameter (DC)	Decimal Equivalent	Connection Diameter Machine Side (DCONMS)	Depth of Cut Maximum (APMX)	Overall Length (OAL)	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
1/8"	0.125"	1/8"	1/2"	1-1/2"	1027667	38.90	20.15	1028806	46.32	25.94	-	-	-	-	-	-
3/16"	0.1875"	3/16"	5/8"	2"	1027671	46.23	32.36	1028808	49.03	34.31	-	-	-	-	-	-
1/4"	0.25"	1/4"	3/4"	2-1/2"	1027675	48.23	33.77	1028809	68.91	48.23	1028811	68.91	48.23	-	-	-
5/16"	0.3125"	5/16"	13/16"	2-1/2"	1027679	65.45	45.82	1028812	89.35	62.54	1028814	89.35	62.54	-	-	-
3/8"	0.375"	3/8"	1"	2-1/2"	1027683	76.02	53.21	1028815	94.79	66.36	1028817	94.79	66.36	-	-	-
1/2"	0.5"	1/2"	1"	3"	1027691	124.61	87.23	1028818	158.83	111.19	1028610	158.83	111.19	1028820	158.83	111.19
5/8"	0.625"	5/8"	1-1/4"	3-1/2"	1027693	225.43	157.79	1028822	296.38	207.47	1028613	296.38	207.47	1028614	296.38	207.47
3/4"	0.75"	3/4"	1-1/2"	4"	1027695	330.79	231.56	1028824	431.63	302.15	1028617	431.63	302.15	1028618	431.63	302.15

61325



MORSE Inch & Metric ER Collets Set

- ER spring collets are the only clamping collet system for combined milling, drilling, reaming and boring
- ER collets concentricity guaranteed to .0004" T.I.R.

Clamping Range:

- All ER11 collets, and ER16 sizes under 1/8" = 0.02"
- All other types collapse 0.039"



Shank Size (SS)	Quantity	Diameter Range	Step Increments	Connection Diameter Minimum Workpiece Side (DCONNWS)	Connection Diameter Maximum Workpiece Side (DCONXWS)	Order No.	Regular Price	SALE
ER11	7	1/16" - 1/4"	1/32"	0.043"	0.25"	1492275	241.19	132.65
ER16	12	1/16" - 13/32"	1/32"	0.043"	0.4062"	1492276	391.44	215.29
ER20	8	3/32", 1/8" - 1/2"	1/16"	0.074"	0.5"	1492277	250.31	137.66
ER25	10	3/32", 1/8" - 5/8"	1/16"	0.074"	0.625"	1492278	348.19	191.51
ER32	12	1/8" - 13/16"	1/16"	0.0856"	0.8125"	1492279	464.31	255.37
ER40	15	1/8" - 1"	1/16"	0.0856"	1"	1492280	728.38	400.61
ER11	13	1 mm - 7 mm	0.5 mm	0.5 mm	7 mm	1492281	441.53	242.84
ER16	10	1 mm - 10 mm	1 mm	0.5 mm	10 mm	1492282	323.16	177.74
ER20	12	2 mm - 13 mm	1 mm	1.5 mm	13 mm	1492283	377.79	207.79
ER25	15	2 mm - 16 mm	1 mm	1.5 mm	16 mm	1492284	496.16	272.89
ER32	18	3 mm - 20 mm	1 mm	2 mm	20 mm	1492285	676.00	371.80
ER40	23	4 mm - 26 mm	1 mm	3 mm	26 mm	1492286	1092.60	600.94

61334

POWER TOOLS

DEWALT 20V Max® Brushless Drywall Screwgun & Cut-Out Tool Combo Kit (2.0AH)

- Screwgun with 4,400 rpm brushless motor provides corded performance without the cord
- Both tools have DEWALT built motors that deliver maximum run-time
- Screwgun is balanced and ergonomic
- comparable to the DW272 DEWALT corded screwgun
- Cut-out tool provides a durable dust sealed switch to protect the life of the tool and 26,000 rpm
- Both tools have bright LEDs to provide greater visibility
- Includes: (1) DCF620 20V MAX® XR® Li-Ion Brushless Drywall Screwgun - Tool, (1) DCS551 20v MAX® XR Li-Ion Cordless Cut-out Tool, (2) DCB203: 20V MAX® Compact Li-Ion Batteries (2.0 Ah), (1) DCB112 - Multi-voltage charger



Model No	Order No.	Regular Price	SALE
DCG263D2	1089009	670.12	603.11

1270

DEWALT 20V Max® Cordless Brushless XR® Drywall Screwgun & Impact Driver Kit (4.0AH)

- Built brushless motor in both units that delivers maximum run time
- XR® Li-Ion batteries with fuel gauge provide 33% more capacity over standard packs
- Impact driver has compact and lightweight designed to fit into tight areas
- Screwgun has up to 4,400 rpm provides greater speed, a better balanced and ergonomic than DW272 corded screwgun
- Impact driver has one-handed loading 1/4" hex chuck accepts 1" bit-tips
- Belt hook included on both units for portability as well as LEDs for increased visibility
- 3-speed settings on impact driver for optimized application versatility
- Precision drive in speed 1 for precision applications and added control
- Includes: DCF620 20V MAX® XR® Drywall Screwgun, DCF887 20V MAX® XR® 1/4" 3-Speed Impact Driver, (2) DCB204 20V MAX® XR 4.0AH Battery Pack, Charger, Contractor Bag, (2) Belt Clips



Model No	Order No.	Regular Price	SALE
DCK267M2	1089012	756.41	680.76

1187

DYNABRADE 5" (127 mm) Dia. Non-Vacuum Dynorbital Extreme Random Orbital Sander

- EXTREME POWER:** New motor design has the highest power-to-weight ratio in the industry, with 0.3 hp at 1.8 lbs Most consistent speed under load in industry, running at 92% of rated tool speed
New rotor design enhances power with less friction
- EXTREME COMFORT:** Ergonomic design with integrated comfort platform for more wrist support and overall operator comfort
Soft grip co-molded to rigid composite base housing for maximum comfort and durability. Recessed throttle lever eliminates pinch and pressure points on an operator's palm
- EXTREME PERFORMANCE:** Premium sanding pad is weight-mated for the lowest vibration levels
Made from the highest quality materials for extreme durability and longevity
- American-made from the highest grade materials for long-life and high durability



Type	Disc Diameter	Air Inlet Size	Maximum RPM	Order No.	Regular Price	SALE
Air Powered Random Orbital Sander	5"	1/4" NPT	12,000	1472349	368.20	332.12

61234

JACOBS Multi-Craft Medium Duty Chucks

- Offered in 1/4", 3/8" and 1/2" capacities
- Through-Hardened jaws for hard wear resistant gripping surfaces



Model No	Minimum Capacity	Maximum Capacity	Minimum Capacity mm	Maximum Capacity mm	Mount Type	Key Style	Order No.	Regular Price	SALE
30598	5/64"	1/2"	2 mm	13 mm	Threaded	KK	0705255	82.00	61.74
30602	5/64"	1/2"	2 mm	13 mm	Threaded	KK	0705256	82.00	61.74
30243	3/64"	1/4"	6.35 mm	6.5 mm	Threaded	KG1	0705227	52.09	39.23
30247	1/16"	3/8"	2 mm	10 mm	Threaded	KG1	0705229	62.06	46.73

6494

JACOBS Heavy Duty Plain Bearing Chucks

Taper Mounted

- Jaws center ground for absolute straightness and alignment
- One piece sleeve eliminates crack between driving teeth, often found in other designs
- Through hardened sleeve teeth, plus hardened nose and keyholes provide outstanding wear resistance
- Each chuck 100% inspected for performance and precision
- T.I.R .004" maximum at half capacity
- Fluted sleeve standard except Model 34-33C, which is smooth and ground
- (2) Equipped with positive drive slot
- (3) Equipped with pin type positive drive
- (4) Equipped with locking collar - 1-1/16-20 thread, smooth sleeve



Model No	Minimum Capacity	Maximum Capacity	Mount Type	Key Style	Order No.	Regular Price	SALE
0	0.135"	5/32"	Tapered	KO	0705328	303.06	228.20
3326A	0.080"	1/2"	Threaded	K32	0705344	518.29	390.28
33	0.080"	1/2"	Tapered	K32	0705339	479.68	361.20
3PD(3)	1/8"	5/8"	Tapered	K3	0705336	927.78	698.61
3A	1/8"	5/8"	Tapered	K3	0705334	597.09	449.61
3KD(2)	1/8"	5/8"	Tapered	K3	0705335	793.84	597.76
36KD(2)	0.180"	0.800"	Tapered	K4	0705214	722.04	543.69
36	0.180"	0.800"	Tapered	K4	0705346	753.51	567.39
34-06	0.040"	1/2"	Tapered	K3	0705345	497.97	374.96
34-02	0.040"	1/2"	Tapered	K3	0705208	374.98	282.35
34-33C(4)	0.040"	1/2"	Tapered	K3C	0705210	391.66	294.92
34-33	0.040"	1/2"	Tapered	K3	0705209	423.88	319.19
33KD	0.080"	1/2"	Tapered	K32	0705340	454.62	342.33

1317



Connectors

- This series of couplers and connectors is designed to interchange with the automotive (Tru-Flate) interchange series of other manufacturers
- All Coilhose (Tru-Flate) Series 16 couplers will accept any Coilhose Series 16 connectors
- All Coilhose (Tru-Flate) Series 59 couplers will accept any Coilhose Type 59 connectors
- All 1/4" body couplers are brass and all 3/8" body couplers are steel



1/2", 12 Series				
Thread Size	Thread Type	Order No.	Regular Price	SALE
1/2"	FPT	0947361	12.00	9.65
1/2"	Hose Barb	0947365	12.91	9.69
1/2"	MPT	0947360	10.71	8.61
3/8"	FPT	0947363	11.27	8.46
3/8"	Hose Barb	0947364	14.29	10.72
3/8"	MPT	0947362	10.72	8.05

1/4", 15 Series				
Thread Size	Thread Type	Order No.	Regular Price	SALE
1/4"	FPT	0947397	3.47	2.79
1/4"	Hose Barb	0947402	6.61	5.31
1/4"	MPT	0947395	3.30	2.66
1/8"	FPT	0947405	4.41	3.30
1/8"	MPT	0947399	4.37	3.28
3/8"	FPT	0947401	7.07	5.68
3/8"	Hose Barb	9664626	7.41	5.56
3/8"	MPT	0947398	6.05	4.86
5/16"	Hose Barb	0947403	8.08	6.06

3/8", 58 Series				
Thread Size	Thread Type	Order No.	Regular Price	SALE
1/2"	FPT	0947737	54.88	41.16
1/2"	Hose Barb	0947739	11.27	8.46
1/2"	MPT	0947740	12.07	9.06
1/4"	FPT	0947736	7.39	5.54
1/4"	MPT	0947735	6.12	4.91
3/8"	FPT	0947734	7.14	5.36
3/8"	Hose Barb	0947738	9.00	7.24
3/8"	MPT	0947733	6.73	5.42

7262



1/3 hp. Straight Die Grinder 308B

- Powerful 1/3 HP Motor
- Safety Lock Lever, Lock-Off Switch
- Rear exhaust
- Includes: (2) Collet Wrenches; Tool; 1/4 in and 6mm Collets



Collet/Chuck	Maximum RPM	Handle Type	Exhaust Type	Order No.	Regular Price	SALE
1/4"	25,000	Straight	Rear	9108157	281.19	224.95

61237



Couplers



1/2", 12 Series				
Thread Size	Thread Type	Order No.	Regular Price	SALE
1/2"	FNPT	0947359	37.65	28.24
1/2"	Hose Barb	0947370	45.79	36.82
1/2"	MNPT	0947367	38.07	28.55
3/8"	FNPT	0947368	40.50	30.38
3/8"	MNPT	0947366	40.50	30.38

3/8", 58 Series				
Thread Size	Thread Type	Order No.	Regular Price	SALE
1/2"	FNPT	0947744	38.15	28.62
1/2"	Hose Barb	0947747	36.43	27.33
1/2"	MNPT	0947746	38.72	29.05
1/4"	FNPT	0947742	31.33	23.51
1/4"	MNPT	0947743	31.29	23.46
3/8"	FNPT	0947732	30.35	22.76
3/8"	Hose Barb	0947745	33.45	25.09
3/8"	MNPT	0947741	30.53	22.90

1/4", 15 Series				
Thread Size	Thread Type	Order No.	Regular Price	SALE
1/4"	FNPT	0947391	13.09	9.81
1/4"	Hose Barb	0947412	16.74	13.47
1/4"	MNPT	0947408	14.35	11.54
1/8"	FNPT	0947417	17.16	12.88
1/8"	MNPT	0947418	18.76	14.07
3/8"	FNPT	0947406	16.45	13.23
3/8"	Hose Barb	0947416	17.85	14.35
3/8"	MNPT	0947414	16.91	13.59
5/16"	Hose Barb	0947413	19.94	14.95

7263



TR Ingersoll Rand 1/4 hp. Right Angle Grinder 301B

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



Collet/Chuck	Maximum RPM	Handle Type	Exhaust Type	Order No.	Regular Price	SALE
1/4"	21,000	Right Angle	Rear	1708654	207.65	166.12

1169



Chicago Pneumatic Air Powered Pencil Grinder 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



Maximum RPM	Order No.	Regular Price	SALE
60,000	1097065	375.14	299.36

1191

HAND TOOLS

Hex Keys

- Heat-treated for durability
- Rust resistant, black oxide finish

Long						
Style	Ball End Size	Overall Length	Model No	Order No.	Regular Price	SALE
Fractional	1/16"	3"	J46204	0897349	0.71	0.50
Fractional	5/64"	3 3/16"	J46205	0897350	0.71	0.50
Fractional	3/32"	3 3/8"	J46206	0897351	0.71	0.50
Fractional	7/64"	3 9/16"	J46207	0897352	0.84	0.59
Fractional	1/8"	3 3/4"	J46208	0897353	1.12	0.78
Fractional	9/64"	3 15/16"	J46209	0897354	0.99	0.70
Fractional	5/32"	4 1/8"	J46210	0897355	1.12	0.78
Fractional	3/16"	4 1/2"	J46212	0897356	1.32	0.92
Fractional	7/32"	4 7/8"	J46214	0897357	2.09	1.46
Fractional	1/4"	5 1/4"	J46216	0897358	3.04	2.13
Fractional	5/16"	6"	J46220	0897359	4.76	3.33
Fractional	3/8"	6 3/4"	J46224	0897360	7.00	4.90
Fractional	7/16"	7 1/2"	J46228	0897361	14.32	10.02
Fractional	1/2"	8 1/4"	J46232	0897362	16.48	11.54
Fractional	.050"	2 7/8"	J46203	0897348	0.71	0.50

Short						
Style	Ball End Size	Overall Length	Model No	Order No.	Regular Price	SALE
Fractional	7/16"	4 3/4"	J46128	0897314	9.72	6.80
Fractional	.035"	1 1/4"	J46102	0897316	0.80	0.56
Fractional	.050"	1 11/16"	J46103	0897327	0.48	0.34
Fractional	1/16"	1 3/4"	J46104	0897328	0.48	0.34
Fractional	5/64"	1 7/8"	J46105	0897329	0.56	0.39
Fractional	3/32"	2"	J46106	0897330	0.60	0.42
Fractional	7/64"	2 1/8"	J46107	0897331	0.56	0.39
Fractional	1/8"	2 1/4"	J46108	0897332	0.60	0.42
Fractional	9/64"	2 3/8"	J46109	0897333	0.71	0.50
Fractional	5/32"	2 1/2"	J46110	0897334	0.71	0.50
Fractional	3/16"	2 3/4"	J46112	0897335	0.99	0.70
Fractional	7/32"	3"	J46114	0897336	1.32	0.92
Fractional	1/4"	3 1/4"	J46116	0897337	1.68	1.18
Fractional	5/16"	3 3/4"	J46120	0897338	3.04	2.13
Fractional	3/8"	4 1/4"	J46124	0897339	4.52	3.16
Fractional	1/2"	5 1/4"	J46132	0897317	11.63	8.15
Fractional	9/16"	5 3/4"	J46136	0897318	16.72	11.70
Fractional	5/8"	6 1/4"	J46140	0897319	22.32	15.62
Metric	1.5 mm	44 mm	J46306	0897323	0.71	0.50
Metric	2 mm	49 mm	J46308	0897340	0.71	0.50
Metric	2.5 mm	55 mm	J46310	0897341	0.99	0.70
Metric	3 mm	62 mm	J46312	0897342	1.04	0.73
Metric	4 mm	68 mm	J46314	0897343	1.40	0.98
Metric	5 mm	78 mm	J46316	0897344	1.68	1.18
Metric	6 mm	88 mm	J46318	0897345	2.32	1.62
Metric	8 mm	98 mm	J46320	0897346	3.88	2.72
Metric	10 mm	109 mm	J46322	0897347	7.00	4.90
Metric	12 mm	122 mm	J46324	0897324	12.36	8.65
Metric	14 mm	136 mm	J46326	0897325	17.96	12.57
Metric	17 mm	156 mm	J46328	0897326	23.32	16.32

11191

PRM PRO Torx® Long Arm L Key

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

Torx Size	Blade Length	Order No.	Regular Price	SALE
T6	3.15"	0887759	3.08	2.46
T7	3.15"	0887760	3.08	2.46
T8	3.15"	0887761	2.81	2.25
T10	3.4"	0887762	2.28	1.82
T15	3.5"	0887763	2.38	1.90
T20	3.7"	0887764	2.51	2.00
T25	4"	0887765	2.69	2.16

781

BONDHUS Pivot Head Hex Key Sets

- Head pivots 180°
- Fits Inch and Metric screws
- Heat treated high quality industrial tool steel
- Long handles for extra reach
- Matte chrome finish to prevent corrosion



Sizes Included	Number of Pieces	Order No.	Regular Price	SALE
3/16", 7/32", 1/4", 5/16", 3/8"	5	0879774	113.29	74.23
3 mm, 4 mm, 5 mm, 6 mm, 8 mm, 10 mm	6	0879775	119.56	78.33
1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	8	0879777	144.80	94.86

10741

Elfind Cushion Grip Individual T-Handle Hex Keys



	9"			6"		
Torx Size	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
3/32"	0866010	5.88	4.41	0865997	5.57	4.19
7/64"	0866011	5.95	4.47	0865998	5.67	4.26
1/8"	0866012	5.95	4.47	0865999	5.67	4.26
9/64"	0866013	6.65	5.00	0866000	6.23	4.68
5/32"	0866014	7.07	5.31	0866001	6.37	4.79
3/16"	0866015	8.30	6.23	0866002	7.53	5.66
7/32"	0866016	10.82	8.13	0866003	9.28	6.97
1/4"	0866017	12.39	9.31	0866004	10.68	8.02
5/16"	0866018	19.99	15.01	0866005	18.03	13.54
3/8"	0866019	25.27	18.98	0866006	22.51	16.91

10780

BONDHUS 22 Pc. Ball Driver Hex Key Set

- Standard and metric
- Ball driver L-wrenches save time in hard to reach and blind locations
- ProGuard finish is 5 times more effective against rust
- Bondhus proprietary protanium steel and are 20 percent stronger than some competitor's tools



Set Includes	Order No.	Regular Price	SALE
.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", 1.5mm, 2mm, 2.5mm, 3mm, 4mm, 5mm, 6mm, 8mm, 10mm	0880542	65.42	42.85

1131

Elfind Balldriver Standard & Metric Sets

- Standard & Metric-Long Arm
- Balldriver provides a 25° angle entry
- Sets come in plastic holder that firmly retains the keys in size marked holes
- Alloy steel- heat treated for optimum strength and ductility

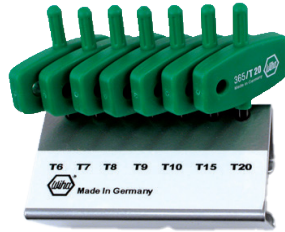


Number of Pieces	Sizes Included	Order No.	Regular Price	SALE
9	1.5 mm, 2 mm, 2.5 mm, 3 mm, 4 mm, 5 mm, 6 mm, 8 mm, 10 mm	0865344	39.28	23.60
13	.050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	0865330	47.15	28.34
22	.050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8", 1.5, 2, 2.5, 3, 4, 5, 6, 8, & 10	0865333	86.41	51.93

2660

wiha 7 Pc. Wing Handle TORX® Set

- Includes: T6, T7, T8, T9, T10, T15, T20 & metal stand
- Precision fit tips
- Hardened steel
- Impact resistant flag handles
- Spinner knobs



Order No.	Regular Price	SALE
0884022	39.16	31.33

11618

wiha T-Handle TORX® Drivers

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



Torx Size	Order No.	Regular Price	SALE
T9	0883931	11.21	8.97
T10	0883932	11.55	9.24
T15	0883933	13.58	10.86
T15	0883934	13.85	11.07
T20	0883935	15.32	12.25
T20	0883936	15.43	12.35
T25	0883938	16.21	12.96
T27	0883940	18.45	14.76
T30	0883942	18.35	14.69

3400

CHANNEL LOCK Original Grip Tongue & Groove Pliers

- Channellock Blue® comfort grip
- Right angle, laser heat treated teeth grip better
- Undercut tongue & groove won't slip
- PermaLock® fastener eliminates nut and bolt failure
- Made from high carbon C1080 steel for superior performance



Overall Length	Number of Positions	Maximum Capacity	Order No.	Reg. Price	SALE
4 1/2"	3	1/2"	0915394	31.26	26.43
6 1/2"	5	7/8"	0915395	27.01	22.84
9 1/2"	5	1 1/2"	0915391	32.58	27.55
10"	7	2"	0915396	33.90	28.67
12"	7	2 1/4"	0915400	38.45	32.51
16 1/2"	8	4 1/4"	0915405	66.32	56.07
20"	12	5 1/2"	0915406	125.08	105.76

1953

CHANNEL LOCK V-Jaw Tongue & Groove Pliers

- Right angle, laser heat-treated teeth grip better and last longer
- Undercut tongue & groove design won't slip
- V-Jaws give you more points of contact on round stock and tubing
- Patented reinforcing edge minimizes stress breakage
- PermaLock® fastener eliminates nut and bolt failure
- CHANNELLOCK® uses high-carbon C1080 steel for superior performance on the job and electronic coating for ultimate rust prevention
- CHANNELLOCK BLUE® grips for comfort



Overall Length	Number of Positions	Maximum Capacity	Order No.	Reg. Price	SALE
9 1/2"	5	1 1/2"	0915393	33.06	27.95
12"	7	2 1/4"	0915401	38.17	32.27

1951

WILLIAMS Straight Locking Pliers

- Convenient one-hand release lever
- Heavy-duty jaw surfaces provide extra gripping power
- Chrome finish



Overall Length	Handle Type	Order No.	Regular Price	SALE
7"	Standard	0889828	22.44	14.50

11409

IRWIN Locking Clamps & Pliers

- The original locking pliers
- Constructed of high-grade heat-treated alloy steel for maximum toughness and durability
- Hardened teeth are designed to grip from any angle
- Backed by the IRWIN VISE-GRIP Lifetime Guarantee



Curved, Yes				
Overall Length	Jaw Capacity	Order No.	Regular Price	SALE
4"	15/16"	0913186	32.78	26.17
5"	1 1/8"	0913201	45.81	36.57
7"	1 1/2"	0913223	47.07	37.56
10"	1 7/8"	0912947	47.86	38.21

Long Nose, Yes				
Overall Length	Jaw Capacity	Order No.	Regular Price	SALE
4"	1 5/8"	0913180	37.17	29.67
6"	2 1/4"	0913216	49.33	39.37
9"	2 7/8"	0913230	59.13	47.19

Wide-Opening				
Overall Length	Jaw Capacity	Order No.	Regular Price	SALE
6"	2 1/8"	0913217	44.00	35.11
6"	2 1/8"	0913218	49.54	39.54
11"	3 3/4"	0912961	79.84	63.73
11"	3 3/4"	0912960	74.24	59.25
18"	8"	0913024	108.65	86.72

Straight, No				
Overall Length	Jaw Capacity	Order No.	Regular Price	SALE
7"	1 5/16"	0913222	47.07	37.56
10"	1 3/4"	0912946	47.86	38.21

Curved, No				
Overall Length	Jaw Capacity	Order No.	Regular Price	SALE
7"	1 5/8"	0913220	47.07	37.56
10"	1 7/8"	0912944	47.94	38.26

Overall Length	Jaw Capacity	Order No.	Price	SALE
8"	3 1/8"	0913226	55.67	44.42

3285

WILLIAMS Reversible Ratcheting Combination Wrench Sets

- High polished chrome finish cleans easily
- Low profile ratchet lever is easily accessible for quick direction changes
- Dynamic Drive® box ends provide extra turning power
- Standard & metric



Number of Pieces	Sizes Included	Order No.	Reg. Price	SALE
8	5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"	0888959	394.80	255.04

4286

PLANT & SAFETY



MAXIFLEX® CUT™ Seamless Knit Nitrile Gloves

- Form Fit and Feel 360° breathability
- Premium Black Micro-Foam Nitrile coated palm
- Green Engineered Yarn Shell
- Reinforced Thumb Crotch
- Sold by the dozen priced by the pair



Size	Order No.	Regular Price	SALE
Small	1111890	18.52	14.81
Medium	1111888	18.52	14.81
Large	1111886	18.52	14.81
X-Large	1111892	18.52	14.81
2X-Large	1111895	18.52	14.81

3494



Grippaz™ Skins

Extended Use Ambidextrous Nitrile Glove with Textured Fish Scale Grip - 6 Mil

- Patented design on the inside and outside of the glove provides extra traction with oily or wet parts
- 6 mil proprietary nitrile blend with patented fish scale pattern is more tear-resistant and puncture-resistant than conventional single-use disposable gloves - for prolonged use and reduced waste
- Touchscreen compatible to allow the user to operate a touch screen phone or device without removing gloves
- Complies with FDA food handling requirements 21 CFR, Part 177



Color	Material	Size	Order No.	Regular Price	SALE
Black	Nitrile	Small	1112353	22.62	18.10
Black	Nitrile	Medium	1112352	22.62	18.10
Black	Nitrile	Large	1112351	22.62	18.10
Black	Nitrile	X-Large	1112354	22.62	18.10
Black	Nitrile	2X-Large	1112355	22.62	18.10

61250



TenActiv™ Feel Friendly Glove™ with CutProtection & Steady Grip

- Special material blend provides comfortable excellent ANSI Level A7 cut resistance protection
- Touchscreen compatible to seamlessly move between tasks
- Micropore nitrile coating DOES NOT absorb oil or other liquids
- Craters act like tiny suction cups to improve grip in wet and oily conditions
- Nitrile thumb crotch reinforcement to reduce wear in critical areas



Size	Order No.	Regular Price	SALE
Medium	1669064	20.48	15.27
Large	1669065	20.48	15.27
X-Large	1669066	20.48	15.27
2X-Large	0115560	20.48	16.31
3X-Large	0115561	20.48	16.31

3155



Endura 365dlx2tl

Cold-rated lineman gloves with 2" cuff featuring reflective silver strips for visibility



Size	Order No.	Regular Price	SALE
Medium	0113477	93.24	74.21
Large	0113478	93.24	74.21
X-Large	0113479	93.24	74.21
2X-Large	0113480	93.24	74.21

61336



String Knit Work Gloves

- 100% polyester fabric
- 13 gauge regular weight
- Breathable, cool and comfortable
- Color coded hem to identify sizes
- Reversible pattern



Type	Color	Material	Size	Order No.	Regular Price	SALE
Strings	White	Polyester	Medium	1145809	15.41	11.58
Strings	White	Polyester	Large	1145803	1.29	0.97

61240

PRM^{PRO} Multi-Purpose Nitrile

- 100% Gray nitrile dipped fingers and palms
- Outstanding comfort and fit
- Superior tactile sensitivity
- 13 Gauge nylon shell



Size	Order No.	Regular Price	SALE
X-Small	0783550	2.53	1.90
Small	0783546	2.72	2.04
Medium	0783544	2.46	1.85
Large	0783542	2.46	1.85
X-Large	0783548	2.46	1.85

8405

PRM^{PRO} All-Purpose Foam Coated

- Black nitrile coated palm glove
- Made for comfort and easy dexterity
- Use in many industrial applications
- 13 Gauge nylon shell
- Color: black



Size	Order No.	Regular Price	SALE
Small	0783537	2.63	1.97
Medium	0783535	2.63	1.97
Large	0783533	2.45	1.83
X-Large	0783539	2.63	1.97

8351

PRM^{PRO} Economy Workmen's

- Gray split cowhide leather palm glove with canvas back
- Clute pattern and knit cuff
- Fleece palm lining
- Color: gray



Size	Order No.	Regular Price	SALE
Large	0783513	5.39	4.05

8374

PRM^{PRO} Nitrile Seamless Gloves - 15 Mil

- Seamless nitrile economy rubber gloves with straight cuff
- Nitrile gloves are three times more puncture resistant than rubber
- Features diamond embossed grip on palm and fingers
- Flock lined for extra comfort and protection
- Used in many industries and wet application
- OAL: 12"



Size	Order No.	Regular Price	SALE
Small	0783568	5.49	3.57
Medium	0783566	5.49	3.57
Large	0783564	5.49	3.57
X-Large	0783570	5.49	3.57

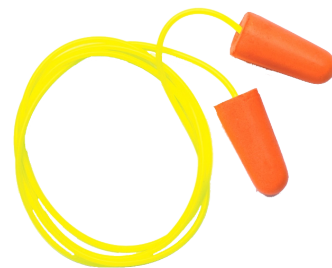
8418

PLANT & SAFETY



Disposable Earplugs

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



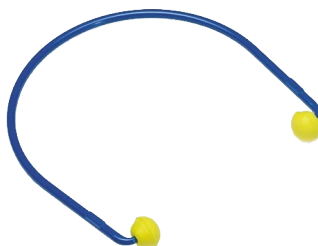
Noise Reduction Rating	Style	Standard Pack	Order No.	Regular Price	SALE
31 dB	Disposable / Uncorded	200	0784641	67.35	50.51
32 dB	Disposable / Corded	100	0784643	67.35	50.51

*All styles meet ANSI S3.19 Specifications

1035

3M Earplugs

- Soft foam seals the ear canal comfortably
- Fits wide range of ear canals
- Can be used with other hearing protection devices
- Disposable and reusable
- Technical Information: Class AL (CSA Z94.2-94), Grade 4 (CSA Z94.2-02)
- Test compatible with 3M™ E-A-Rfit™ Validation System
- †The NRR may overestimate the protection provided during typical use. 3M recommends reducing the NRR by 50% for estimating the amount of noisereduction provided. See packaging for details.



0776348



0774771



0782501



0782371

Noise Reduction Rating	Style	Standard Pack	Order No.	Regular Price	SALE
17 dB	Banded Hearing Caps	1	0776348	13.22	10.16
25 dB	Corded	100	0777476	2.39	1.83
29 dB	Corded	100	0782565	2.25	1.74
32 dB	Corded	120	0782501	1.68	1.29
29 dB	Disposable / Corded	100	0774802	0.63	0.48
33 dB	Disposable / Corded	200	0774780	1,001.07	0.39
33 dB	Disposable / Foam	500	0782371	474.84	0.18
29 dB	Disposable / Uncorded	200	0774771	0.28	0.21
33 dB	Disposable / Uncorded	200	0774914	548.93	0.21
29 dB	General Purpose	200	0777489	671.43	0.27
25 dB	Reusable	100	0778265	4.49	3.46
25 dB	Reusable	100	0778258	2.38	1.83
25 dB	UltraFit	200	0777675	3.96	3.05

7833

MOLDEX Sparkplugs® Disposable Earplugs

- Extra-soft, low-pressure foam for comfort and fit
- Non-irritating smooth surface
- Metal detectable earplugs and cord for food processing applications



Order No.	Regular Price	SALE
9721435	22.96	19.52
9721484	117.82	100.16
9721490	72.74	61.84
9721569	96.00	81.59
9721570	184.62	156.93
9721576	180.11	153.09
9721577	170.16	144.63
9721585	285.80	242.93
9721593	117.14	99.57
9721594	184.67	156.97
9721642	97.26	82.67
3930142	71.09	60.42

61337

STREAMLIGHT ProTac® 2 AA Flashlight

- Bulb: C4" LED
- Size: 6.14"
- Battery: 2 AA alkaline (included)
- Run time: High - 2 hrs, 155 lumens, 3,300 candela peak beam intensity Low - 36 hrs 11 lumens, 200 candela peak beam intensity
- Strobe - 4 hrs
- Body: Durable, anodized aluminum construction with impact resistant tempered glass lens
- Features: Ten-Tap® programming: three selectable programs high/strobe/low; high only; low/high, IPX7 waterproof to 1 meter for 30 minutes, 2 meter impact resistance, nylon holster included



Order No.	Regular Price	SALE
0771908	142.70	113.36

8908

STREAMLIGHT Stylus® LED Penlights

- Style, convenience and a 100,000-hour bulb
- Bulb: high intensity 5mm LED, 11 lumens
- Body: anodized machined aluminum housing
- Battery: 3-AAAA (included)
- Run time: max. up to 60 hours of continuous use
- 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	0771864	49.99	39.70
Blue	0771866	49.99	39.70

2372

MOLDEX Moldex 2300N95 Disposable Particulate Respirator with Exhale Valve**NIOSH Approved**

- LASTS LONGER LESS WASTE Exclusive DURA-MESH SHELL protects the filter media, so it stays cleaner-looking longer. The shell also resists collapsing in hot, humid environments, so the respirator holds its shape longer and the result is fewer respirators used and lower costs.
- EXHALE VALVE Lets workers breath easier and stay cooler.
- MORE COMFORT LESS PRESSURE The face piece is naturally contoured and the molded pinch free nose bridge seals easily without a metal nose band.
- MADE IN AMERICA Quality you can trust.
- SUSTAINABLE SOLUTIONS 100% PVC-Free, like all Moldex products and packaging.



Type	Style	Order No.	Regular Price	SALE
Disposable	N95	9721500	68.05	57.84

61272

3M Particulate Respirator 8210V, N95

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



Order No.	Regular Price	SALE
0778684	2.81	2.17

7855

MEDI FIRST Gauze, Pads & Wraps

- Wide variety to choose from

**MEDI FIRST Tapes & Bandages**

- For cuts & wounds



ProductName	Order No.	Regular Price	SALE
Eye Pads	0785860	4.54	3.63
Alcohol Prep Pads 50Ct	0785812	5.07	4.06
Sterile Gauze Pads	0785842	7.63	6.10
Medi-Rip Self-Adherent Wrap	0785838	9.52	7.62
Non-Adherent Pads	0785859	27.59	22.08
Bloodstopper Compress	0785857	8.51	6.80
Antiseptic Wipes 20Ct	0785810	3.93	3.15

8220

ProductName	Quantity	Length	Width	Order No.	Regular Price	SALE
Triangle Bandage, Non-Sterile	1	56"	40"	0785861	1.82	1.46
Knuckle Bandage 40Ct	40	-	-	0785846	10.19	8.15
Fingertip Bandage 40Ct	40	-	-	0785845	11.02	8.82
7/8X3 Flexible Bandage	50	3"	7/8"	0785844	9.42	7.53
Tri-Cut Adhesive Tape	1	5 yard	3/8"[5/8"]1"	0785840	10.07	8.05
1X3 Strip Bandages 100Ct	100	3"	1"	0785830	8.19	6.55

8226

PLANT & SAFETY

CREWS GLASSES LAW® Safety Glasses

- Non-slip gel temple pads
- Universal nose bridge comfortably fits
- large user audience
- Contemporary, wrap-around lens design



Lens Color	Lens Coating	Frame Color	Order No.	Regular Price	SALE
Gray	Scratch Resistant	Gray	0785979	5.36	4.56

2363

CREWS GLASSES MCR Safety LCT Lens Cleaning Towelettes

100 Wipes

- 100 individually packaged wipes per box
- Pre-moistened lens cleaning towelettes
- Special anti-static, anti-fog formula
- For plastic, polycarbonate, or glass lenses and goggles
- Not for use on contact lenses



Type	Order No.	Regular Price	SALE
Cleaning Towelettes	0785976	12.25	10.44

61241

PYREMAX Intruder®

- Economical lightweight glass that offers superior protection
- Lenses are coated for superior scratch protection

Lens Color	Lens Coating	Frame Color	Order No.	Regular Price	SALE
Clear	Scratch Resistant	Clear	0784872	3.63	2.72
Gray	Scratch Resistant	Gray	0784874	4.17	3.14

8615

Skullerz® 8950 Bump Cap

- Removable impact-resistant ABS plastic shell
- Thermo-formed foam cushioning
- Unique flanged shell design for a comfortable fit and air flow
- EN 812: 2012 Certified
- Nylon Taslan cap construction with reflective accents
- Strategically placed side and rear mesh venting panels



Color	Order No.	Regular Price	SALE
Black	0931220	59.19	47.35
Navy	0931223	59.19	47.35

8000

PYREMAX Safety Glasses

Exceeds ANSI Z87.1-2003 High Impact Requirements

Avante

- Lightweight sport styling
- Built in rubber nose pad
- Vented frame
- 99% Effective against UV rays
- Black frame V2 Reader
- Reader lens is out of user's direct line of sight
- 5 Different sizes of magnification available, clear lens
- 9.75 Base curved lens provides full side protection



Lens Color	Lens Coating	Magnification	Order No.	Regular Price	SALE
Clear	Scratch Resistant	1.0x	0784739	23.07	17.30
Clear	Scratch Resistant	1.5x	0784740	23.07	17.30
Clear	Scratch Resistant	2.0x	0784741	23.07	17.30
Clear	Scratch Resistant	2.5x	0784742	23.07	17.30
Clear	Scratch Resistant	3.0x	0784743	23.07	17.30

1016

PYREMAX Cortez Safety Glasses

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



Lens Color	Lens Coating	Frame Color	Order No.	Regular Price	SALE
Clear	Scratch Resistant	Black	0784755	7.34	5.50
Clear	Scratch Resistant	Orange	0784826	7.34	5.50

3229





Skullerz® 8960 Bump Cap with LED Lighting Technology

- Removable impact-resistant ABS plastic shell
- Thermo-formed foam cushioning
- Nylon Taslan cap construction with reflective accents
- Strategically placed side and rear mesh venting panels
- Patented LED lighting technology
- Two ultra-bright LEDs in the brim for illumination up to 50ft
- Four replacable CR2032 long life lithium batteries (included)
- EN 812: 2012 Certified



Color	Order No.	Regular Price	SALE
Navy	0931234	95.97	76.78
Black	0931233	95.97	76.78

8001

Master Lock® Steel Lockout Hasps

0908685 & 0908686

- Lockout by multiple workers at each lockout point
- Keeps equipment inoperative while repairs or adjustments are being made
- Control cannot be turned on until last worker's safety padlock is removed from hasp
- Heavy gauge steel jaw with red vinyl coated handle



0908687

- Red lockout hasp with tagout identification for multiple workers
- Features an easy-to-apply 'snap-on' advantage with its spring-loaded locking arm
- Fits more lockout points than alternative rivet hinge labeled lockout hasps
- Anodized aluminum and stainless steel construction for combined corrosion resistance and strength
- Complete with high visibility, write-on safety labels (English, French & Spanish)



Order No.	Regular Price	SALE
0908687	37.30	33.62
0908686	12.93	11.66
0908685	11.06	9.96

8230

Master Lock® Grip Tight™ Circuit Breaker Lockout

- Secure and simple mounting for a solid lockout
- Grips tight with simple thumb turn and clamping handle
- The Grip Tight Circuit Breaker lockout offers superior holding power
- Durable construction with powder coated steel and reinforced polymer allows operation in harsh environments and both devices accept all American Lock® and Master Lock® safety padlock shackle and lockout hasp diameters



Order No.	Regular Price	SALE
0908696	23.25	20.96
0908697	17.84	16.08
0908705	46.21	41.66

8118

MEASURING TOOLS

PR+CHECK Premier Stainless Steel

Dial Calipers

- Covered rack for longer caliper life, keeping chips out
- Satin-chrome finish
- Complete with fitted case
- Certificate of Inspection included
- 1 Year Warranty



Measuring Range	Graduation	Order No.	Regular Price	SALE
0-4"	0.001"	1079622	63.71	41.36
0-6"	0.0008"	0394133	123.07	67.56
0-6"	0.001"	0394132	123.07	67.56
0-6"	0.001"	0394131	210.62	115.63
0-6"	0.001"	0394130	115.98	63.67
0-6"	0.001"	0394134	163.32	89.67
0-12"	0.001"	0442036	169.09	109.75

† 0394132 Metric on scale only

517

Mitutoyo Dial Calipers

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



Measuring Range	Graduation	Range Per Revolution	Dial Face Color	Order No.	Regular Price	SALE
0-6"	0.0008"	2 mm	White	1044617	201.60	171.36
0-6"	0.0008"	2 mm	White	1044621	441.00	374.85
0-6"	0.0008"	2 mm	White	1044622	431.20	366.52
0-6"	0.001"	0.1"	Blue	1044630	229.60	195.16
0-6"	0.001"	0.1"	Purple	1044631	229.60	195.16
0-6"	0.001"	0.1"	Red	1044633	229.60	195.16
0-6"	0.001"	0.2"	White	1044637	337.40	286.79
0-6"	0.004"	1 mm	White	1044619	221.20	188.02
0-8"	0.0008"	2 mm	White	1044618	298.20	253.47
0-8"	0.001"	0.1"	White	1044626	611.80	520.03
0-8"	0.001"	0.1"	White	1044624	462.00	392.70
0-8"	0.001"	0.2"	White	1044628	312.20	265.37
0-8"	0.004"	1 mm	White	1044620	322.00	273.70
0-12"	0.0008"	2 mm	White	1044638	476.00	404.60
0-12"	0.001"	0.1"	White	1044639	509.60	433.16
0-12"	0.001"	0.1"	White	1044640	649.60	552.16
0-12"	0.001"	0.1"	White	1044641	967.40	822.29
0-12"	0.001"	0.2"	White	1044643	630.00	535.50
0-12"	0.001"	0.2"	White	1044642	476.00	414.12

9606

Mitutoyo Mitutoyo 500-196-32

Electronic Caliper

- Digital display for fast, clear readings
- Hardened Stainless Steel construction
- 1.97" jaw length for versatile measurement
- ABSOLUTE AOS sensor for stable operation

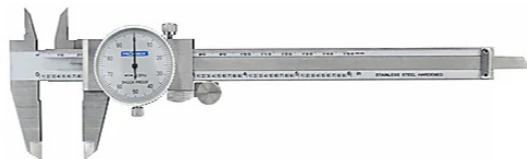


Measuring Range	Resolution	Accuracy	Order No.	Regular Price	SALE
0-6"	0.0005" / 0.01 mm	+/-0.001"	875228A	294.11	240.38

61350

PR+CHECK 18" Heavy Duty Dial Caliper

- 0.001" graduation
- 0-100 dial reading
- 3-1/8" deep jaws
- Inside and outside measurement on one set of jaws
- Covered rack
- Depth measuring rod



Order No.	Regular Price	SALE
1079621	322.20	209.10

9782

PR+CHECK 6" Electric Digital Caliper

- Measuring Range: 0-6" (0-150 mm)
- Without Output Resolution: 0.0005" (0.01 mm)



Order No.	Regular Price	SALE
1079695	120.90	78.47

14579

INSIZE Digital Outside Calipers

- Battery CR2032
- Data output
- Made of Stainless Steel
- Supplied with certification



Measuring Range	Resolution	Model No	Order No.	Regular Price	SALE
0-6"	0.0005" / 0.01 mm	1108-150	1225202	118.68	106.81
0-8"	0.0005" / 0.01 mm	1108-200	1225203	177.37	159.63
0-12"	0.0005" / 0.01 mm	1108-300	1225204	266.77	240.10

518

INSIZE Dial Caliper

- Graduation 0.001"
- Shockproof dial
- Stainless Steel
- Supplied with certification



Measuring Range	Model No	Order No.	Regular Price	SALE
0-6"	1311-6	1225216	126.32	113.69
0-8"	1311-8	1225217	167.27	150.54
0-12"	1311-12	1225215	279.75	251.78

2972

TESA brown & sharpe

0-6" Dial-Cal Calipers

- Graduation 0.001"
- Range per revolution 0.100"
- Stainless Steel construction
- Adjustable zero set
- 1.25" diameter rotating dial with lock
- Anti-backlash, shockproof design
- Measure four ways: inside, outside, depth, and step



Measuring Range	Dial Face Color	Jaw Length	Model No	Order No.	Regular Price	SALE
0-6"	Black	1-1/2"	599-579-5	1067291	309.12	278.83
0-6"	Silver	1-1/2"	599-579-4	1067277	309.12	278.83

645

PRO-CHECK 12" Combination Square Sets

Sets Consist Of:

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



Number of Pieces	Order No.	Regular Price	SALE
2	1079664	50.41	32.72
3	1079665	63.56	41.24
4	1079666	115.98	75.26

9780

TESA brown & sharpe

BesTest® Dial Test Indicators

BesTest -3 and -13 Series:

- BesTest -3 and -13 sets are furnished with 0.080" carbide contact points, a rectangular bar, swivel clamp, point wrench, and a certificate of accuracy and traceability in a fitted wooden case
- The -3 sets with end mounted dials are furnished with a universal dovetail mounting attachment (7054) in place of the rectangular bar and swivel clamp

BesTest -5 Series (Black Face):

- BesTest -5 sets are furnished with an .080" carbide contact point, a .250" diameter extension with dovetail, point wrench, and a certificate of accuracy

BesTest -6 & -14 Series (White Face):

- BesTest -6 & -14 sets are furnished with 3 carbide contact points. .040", .080", and .120", 2 extensions with dovetail, point wrench, and a certificate of accuracy



Total Range	Dial Reading	Graduation	Dial Face Diameter	Contact Length	Point Diameter	Order No.	Regular Price	SALE
0.008"	0-4-0	0.0001"	1 1/2"	1/2"	0.080"	1067148	626.29	564.91

61361

MEASURING TOOLS

PROCHECK AGD Dial

Indicators - Certified

- Flat back, 1/4" lug back, and fitted case
- Adjustable limit pointers for easy 'Go/No-Go' reading
- Revolution counter
- Certificate of inspection included, Standard ASME B89.1.10M-2001
- 1 Year Warranty



Dial Reading	Dial Size	Dial Color	Order No.	Regular Price	SALE
0-50	2-1/4"	White	1649568	79.56	57.53
0-100	2-1/4"	White	1649576	71.31	51.56
0-100	2-1/4"	White	1649570	146.36	105.83
0-100	2-1/4"	White	1649567	71.31	51.56
0-100	2-1/4"	Black	1649565	71.31	51.56
0-100	2-1/4"	Black	1649569	146.36	105.83
0-100	2-1/4"	Black	1649566	71.31	51.56

674

INSIZE Dial Indicators

- Lug back
- Limit pointers and bezel clamp provided
- Certificate of inspection included Standard ASME B89.1.10M-2001
- Graduation 0.001"



Model No	Total Range	Order No.	Regular Price	SALE
2307-1	1"	1225227	73.25	65.93
2307-2	2"	1225228	175.92	158.33

666

PROCHECK AGD 2 Dial Indicators

- 2-1/4" dial diameter
- Lug back
- Revolution counter
- Easy to read



Total Range	Dial Reading	Graduation	Dial Color	Order No.	Regular Price	SALE
1.0"	0-50	0.0005"	White	1080043	40.62	29.37
1.0"	0-100	0.001"	White	1080038	48.40	35.00

9802



Individual Edge &

Center Finders

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



Style	End Type	Shank	Tip Diameter	Order No.	Regular Price	SALE
Edge	Single End	3/8"	0.2	1066689	30.80	27.78
Edge	Single End	1/2"	0.2	1066690	30.80	27.78
Edge	Single End	1/2"	0.500"	1066927	30.80	27.78
Edge	Double End	1/2"	0.200" x 0.500"	1066928	43.40	39.15

61362



Electronic Bore Gages

Pistol Grip

- Larger easier to read swivel display
- USB connectivity
- Four preset memories
- Fixed anvils
- Resolution: 0.00005" / 0.001mm
- Trigger is adjustable for minimum over travel
- Tungsten Carbide measuring faces on all 3 point heads .500" & up.
- Sizes over .500" (12.5mm) feature blind bore capability
- Setting rings included in all sets
- Includes UKAS certificates for all pistol grips, heads, and rings



Minimum Measurement	Maximum Measurement	Included	Model No	Order No.	Regular Price	SALE
3/4" (20 mm)	4" (100 mm)	6 heads, 1 handle, 4 rings	54-567-210-BT	1078919	9265.20	8338.68

9213



Electronic Height Gage

- Swiss-made precision height gauge for high-accuracy inspection on the shop floor
- Measures height, diameters, perpendicularity, centerlines, and Min/Max/Delta functions
- High-resolution digital readout for precise, repeatable measurements
- Air-cushion base for smooth, controlled movement on surface plates



Maximum Measurement	Resolution	Graduation	Order No.	Regular Price	SALE
28" / 711 mm	0.00005" / 0.001 mm	0.00005" / 0.001 mm	1078725	15496.60	14721.77

61360

PRC CHECK Certified Rectangular Block Sets

All gage block sets are assigned serial numbers and certificate of grades and tolerances.

- Premium certified sets come with long form certifications from an ISO 17025 certified U.S. Laboratory and will meet all of your ISO requirements
- Economy set comes with non-traceable certificate only

36 Pc. Sets Include:

- 1 Block: 0.10005"
- 2 Blocks: 0.1000" and 0.1005"
- 3 Blocks: 0.200", 0.300" and 0.500"
- 3 Blocks: 1.000", 2.000" and 4.000"
- 9 Blocks: 0.1001" - 0.1009" step of 0.0001"
- 9 Blocks: 0.101" - 0.109" step of 0.001"
- 9 Blocks: 0.110" - 0.190" step of 0.01"

81 Pc. Sets Include:

- 1 Fitted wooden case
- 4 Blocks: 1.000" - 4.000" step of 1.000"
- 9 Blocks: 0.1001" - 0.1009" step of 0.0001"
- 9 Blocks: 0.101" - 0.149" step of 0.001"
- 19 Blocks: 0.150" - 0.950" step of 0.050"



Material	Number of Pieces	Grade	Order No.	Regular Price	SALE
Steel	36	0	1079854	811.96	526.96
Steel	36	B	1079852	238.67	154.90
Steel	81	B	1079856	391.34	253.97

14605

INSIZE Universal Magnetic Base Indicator Holder

- With fine adjustment and dovetail groove
- Magnetic force: 176 lbf



Model No	Order No.	Regular Price	SALE
6208-80E	1225329	203.49	183.15

9508

TESA brown & sharpe

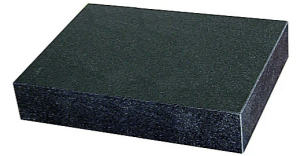
Combination Square Blades

Blade Size	Graduation	Order No.	Regular Price	SALE
12"	1/8", 1/16", 1/32", 1/64"	1067067	77.00	69.45

61363

PRC CHECK Precision Toolroom Black Granite Surface Plates

- Meets Federal Specification GGG-P-463c
- Does not rust or corrode
- Does not nick or burr tools
- Harder than steel
- Retains accuracy for years
- Guaranteed repeat reading
- Autocollimator checked for overall accuracy
- Certificate of accuracy not included
- All plates are 0-ledge with grade B accuracy



Width	Length	Thickness	Accuracy	Weight	Order No.	Regular Price	SALE
9"	12"	3"	.00010"	38 lbs	1085462	70.11	48.94
12"	12"	3"	.00010"	60 lbs	1085463	87.61	61.15
12"	18"	3"	.00010"	75 lbs	1085464	116.63	81.41
18"	24"	3"	.00015"	147 lbs	1085466	237.33	165.65
24"	36"	4"	.00020"	418 lbs	1085468	561.09	391.64
36"	48"	6"	.00040"	1,258 lbs	1085470	1317.76	919.80
36"	72"	6"	.00070"	1,850 lbs	1085471	3639.02	2540.03

15014

Fowler Digit Counter Micrometers

- Digital Counter
- Resolution .0001" (using vernier)
- Carbide tipped measuring faces
- Ratchet thimbles
- Positive locking nut on spindle
- Sizes over 1" supplied with standards
- Complete in shop hardened case



Minimum Measurement	Maximum Measurement	Graduation	Order No.	Regular Price	SALE
0"	1"	0.0001"	1077879	215.60	194.04
1"	2"	0.0001"	1077880	278.60	250.74
2"	3"	0.0001"	1077881	317.80	286.02

9247

Fowler Electronic Micrometers Xtra Value II

- Jet black and gray enamel finish
- Large LCD display
- Resolution: 0.00005"/0.001 mm
- Direct RS 232 output
- Carbide measuring faces
- Absolute and incremental modes
- Ratchet thimble
- Includes shop hardened case



Minimum Measurement	Maximum Measurement	Order No.	Regular Price	SALE
0"	1" / 25 mm	1078987	148.40	140.98
2" / 50 mm	3" / 75 mm	1078989	240.80	228.76
3" / 75 mm	4" / 100 mm	1078990	292.60	277.97
1"	2"	1078988	197.40	187.53

2075

MEASURING TOOLS

Mitutoyo Coolant Proof Micrometers - Series 293

- IP65 protection; suitable for cutting-oil environments (anti-corrosion care required after use)
- 0.0005" / (0.001mm) resolution
- Carbide-tipped faces
- SR44 battery (included; replacement 0771789)
- Auto power on/off
- Standard included on sizes over 1" (25mm)
- Fitted case included



Electronic Coolant Proof Outside Micrometer with SPC						
Maximum Measurement	Resolution	Thimble Type	Accuracy	Order No.	Regular Price	SALE
1" / 25.4 mm	0.00005" / 0.001 mm	Ratchet	±0.00005"	1043397	425.60	383.89
1" / 25.4 mm	0.00005" / 0.001 mm	Ratchet	±0.00005"	1043323	434.00	391.47
1" / 25.4 mm	0.00005" / 0.001 mm	Ratchet	±0.00005"	1043389	435.40	392.73
2"	0.00005" / 0.001 mm	Friction	±0.00005"	1043401	466.20	420.52

Maximum Measurement	Resolution	Thimble Type	Accuracy	Order No.	Regular Price	SALE
1" / 25.4 mm	0.00005" / 0.001 mm	Friction	+/-0.00005"	1043413	441.00	374.85
2"	0.00005" / 0.001 mm	Ratchet	+/-0.00005"	1043405	441.00	374.85
2"	0.00005" / 0.001 mm	Ratchet	+/-0.00005"	1043391	512.40	462.18

Electronic Coolant Proof Outside Micrometer no SPC						
Maximum Measurement	Resolution	Thimble Type	Accuracy	Order No.	Regular Price	SALE
1" / 25.4 mm	0.00005" / 0.001 mm	Ratchet	±0.00005"	1043403	400.40	340.34
4" / 101.6 mm	0.00005" / 0.001 mm	Ratchet	± 0.0001"	1043417	624.40	530.74
4" / 101.6 mm	0.00005" / 0.001 mm	Ratchet	±0.00005"	1043337	614.60	522.41

9643

Mitutoyo Coolant Proof Micrometers

Series 293 - with Dust/Water Protection Conforming to IP65 Level

- No data output
- IP65 protection level, enabling use in environments exposed to cutting oil
- Carbide tipped measuring faces
- Uses SR44 battery (included)
- Standard included on sizes over 1"/25mm
- Supplied in fitted case
- Replacement battery order number is 0771789



Maximum Measurement	Resolution	Thimble Type	Accuracy	Order No.	Regular Price	SALE
1" / 25.4 mm	0.00005" / 0.001 mm	Friction	±0.00005"	1043419	400.40	348.35
1" / 25.4 mm	0.00005" / 0.001 mm	Friction	+/-0.0001"	1043415	578.20	503.03
3" / 76.2 mm	0.00005" / 0.001 mm	Ratchet	±0.00005"	1043393	634.20	603.76

2165

Mitutoyo Digimatic Micrometers

SERIES 293 MDC- Lite

- Carbide tipped measuring faces
- Uses (1) SR44 battery (included)
- Large LCD screen
- No data output
- Supplied in fitted case
- Replacement battery order number is 0771789



Maximum Measurement	Resolution	Thimble Type	Accuracy	Order No.	Regular Price	SALE
1" / 25.4 mm	0.00005" / 0.001 mm	Ratchet	+/-0.00005"	1043482	291.20	247.81

9684

PRO-CHECK 1/8" Steel Parallel Set

Thin Styled, Matched Pairs - 10 Pair in Fitted Box

- Made of high grade alloy steel, hardened and ground from 1/8" stock
- Two holes in each parallel
- Accuracy: ±0.0002" parallelism in height
- ±0.001" to size in height



Order No.	Regular Price	SALE
1085021	166.33	125.09

542

**Class ZZ Gage Pin Sets****Certified and Non-Certified (+/- .0002" Tol.)**

- Location and gage slot checks
- Hole size and depth verification
- Ground edges for precision
- A10 micro finish or better
- 60 - 63 HRC heat treated
- 2" uniform length with case

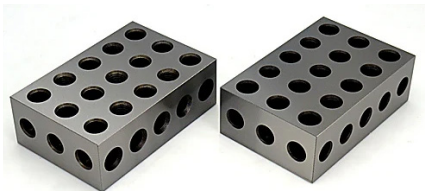


Minimum Diameter	Maximum Diameter	Tolerance Type	Number of Pieces	Gage Pin Set (Certified)			Gage Pin Set		
				Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
0.0110"	0.0600"	Minus (No Go)	50	0770845	102.21	71.75	0770847	69.41	48.73
0.0110"	0.0600"	Plus (Go)	50	0770846	102.21	71.75	0770848	69.41	48.73
0.0610"	0.2500"	Minus (No Go)	190	0770849	266.15	186.84	0770851	155.15	108.92
0.0610"	0.2500"	Plus (Go)	190	0770850	266.15	186.84	0770852	155.15	108.92
0.2510"	0.5000"	Minus (No Go)	250	0770855	455.80	319.97	0770857	236.12	165.76
0.2510"	0.5000"	Plus (Go)	250	0770856	455.80	319.97	0770858	236.12	165.76
0.5010"	0.6250"	Minus (No Go)	125	0770859	467.98	328.52	0770861	263.96	185.30
0.5010"	0.6250"	Plus (Go)	125	0770860	467.98	328.52	0770862	279.66	196.32
0.6260"	0.7500"	Minus (No Go)	125	0770863	497.06	348.94	0770865	348.00	244.30
0.6260"	0.7500"	Plus (Go)	125	0770864	497.06	348.94	0770866	351.86	247.00
0.7510"	0.8320"	Minus (No Go)	82	0770867	605.49	425.05	0770869	383.22	269.02
0.7510"	0.8320"	Plus (Go)	82	0770868	605.49	425.05	0770870	371.62	260.88
0.8330"	0.9160"	Minus (No Go)	84	0770871	707.59	496.72	0770873	408.07	286.47
0.8330"	0.9160"	Plus (Go)	84	0770872	609.32	427.74	0770874	408.07	286.47
0.9170"	1.0000"	Minus (No Go)	84	0770875	817.57	573.93	0770877	493.18	346.21
0.9170"	1.0000"	Plus (Go)	84	0770876	817.57	573.93	0770878	475.33	333.68

9837

**Tri-Block Sets**

- Tolerance: 0.0001"
- Additional tolerance: 0.0003" - 0.0005" (0.005-0.01 mm)
- Hardness: 55-62 HRC
- Fitted plastic case



Overall Width	Overall Length	Overall Height	Order No.	Regular Price	SALE
25 mm	50 mm	75 mm	1085015	56.57	39.66
1"	2"	3"	1085017	77.15	54.08
1"	2"	3"	1085014	33.60	23.55
2"	4"	6"	1085019	338.42	237.23

551

Mitutoyo Telescope Gage Sets

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



Overall Length	Minimum Measurement	Maximum Measurement	Order No.	Regular Price	SALE
4"	5/16" / 8.0 mm	2 1/8" / 54.0 mm	1041741	221.20	188.02
5"	1/2" / 12.7 mm	6" / 150.0 mm	1041738	326.20	277.27
6"	5/16" / 8.0 mm	6" / 150.0 mm	1041737	408.80	347.48

61331

WORKHOLDING



Heavy Duty Spindle Type Live Centers

- Excellent heavy-duty live center for most turning applications
- Guaranteed $\pm 0.00005"$ T.I.R.
- Heavy-duty precision bearings provide exceptional thrust and radial load capacity
- The substantial point extends into the shank and is supported by a large needle bearing for increased strength and rigidity
- Bearing life is extended with Royal's Roto-Shield® coolant slinger
- Spring-loaded seal resistant to abrasion, high temperatures, and virtually all metalworking fluids
- Body and point are hardened for strength and durability
- On CNC models, the extended point provides excellent tool clearance



CNC											
Mount	Head Diameter	Head Length	Point Length	Point Diameter	Tip Diameter	Maximum RPM	Radial Load	Thrust Load	Order No.	Regular Price	SALE
2 MT	1 3/4"	1 7/16"	1 3/8"	7/8"	3/8"	6,000	375 lbs	2,360 lbs	0703480	1449.00	1231.65
3 MT	2 3/8"	1 3/4"	1 7/8"	1"	3/8"	5,000	740 lbs	3,900 lbs	0703481	1449.00	1231.65
4 MT	2 3/4"	1 31/32"	2 7/32"	1 1/4"	1/2"	4,500	1,120 lbs	4,050 lbs	0703482	1841.00	1564.85
5 MT	3 1/2"	2 13/16"	2 5/8"	1 1/2"	1/2"	3,500	1,930 lbs	5,700 lbs	0703483	2464.00	2094.40

Standard											
Mount	Head Diameter	Head Length	Point Length	Point Diameter	Tip Diameter	Maximum RPM	Radial Load	Thrust Load	Order No.	Regular Price	SALE
2 MT	1 3/4"	1 7/16"	1 1/32"	7/8"	7/8"	6,000	725 lbs	2,360 lbs	0703475	1374.80	1168.58
3 MT	2 3/8"	1 3/4"	1 1/4"	1"	1"	5,000	970 lbs	3,900 lbs	0703476	1374.80	1168.58
4 MT	2 3/4"	1 31/32"	1 1/2"	1 1/4"	1 1/4"	4,500	1,720 lbs	4,050 lbs	0703477	1799.00	1529.15
5 MT	3 1/2"	2 13/16"	1 7/8"	1 1/2"	1 1/2"	3,500	3,260 lbs	5,700 lbs	0703478	2464.00	2094.40
6 MT	4 5/32"	3 5/32"	2 5/32"	2"	2"	3,500	4,080 lbs	6,000 lbs	0703479	4613.00	3921.05

6900



High Precision Quad Bearing Live Centers

- Ideal for grinding and tight-tolerance turning
- Guaranteed $\pm 0.00005"$ T.I.R.
- Quad-bearing design with three angular-contact bearings and needle-roller support for maximum rigidity and low deflection
- Royal's Roto-Shield® and long-life seal extend bearing life
- Low-profile head provides excellent tool clearance
- Hardened body and point for durability



CNC											
Mount	Head Diameter	Head Length	Point Length	Point Diameter	Tip Diameter	Maximum RPM	Radial Load	Thrust Load	Order No.	Regular Price	SALE
3 MT	1.70"	2.120"	1.75"	0.880"	0.380"	6,000	465 lbs	1,270 lbs	0703516	1603.00	1362.55
4 MT	2.45"	2.780"	2.35"	1.250"	0.500"	5,000	1,230 lbs	2,150 lbs	0703517	1953.00	1660.05
5 MT	2.45"	2.780"	2.35"	1.250"	0.500"	5,000	1,230 lbs	2,150 lbs	0703518	2065.00	1755.25

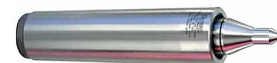
Standard											
Mount	Head Diameter	Head Length	Point Length	Point Diameter	Tip Diameter	Maximum RPM	Radial Load	Thrust Load	Order No.	Regular Price	SALE
3 MT	1.70"	2.120"	1.07"	0.880"	3/8"	6,000	885 lbs	1,270 lbs	0703490	1652.00	1404.20
4 MT	2.45"	2.780"	1.47"	1.250"	1 1/4"	5,000	2,240 lbs	2,150 lbs	0703491	1953.00	1660.05
5 MT	2.45"	2.780"	1.47"	1.250"	1 1/4"	5,000	2,240 lbs	2,150 lbs	0703492	2065.00	1755.25
5 MT	3.82"	3.890"	2.31"	2.00"	2"	3,000	5,240 lbs	5,300 lbs	0703493	4130.00	3510.50

6901



Spring Type Live Centers - Standard & CNC Point

- Unique spring-loaded point compensates for workpiece thermal expansion
- $\pm 0.00005"$ T.I.R. guaranteed
- Low-profile design provides outstanding tool clearance
- Heavy disc springs ensure that the point remains seated in the workpiece
- Point and shank are hardened for strength and durability



Order No.	Regular Price	SALE
0703505	2002.00	1701.70
0703506	2786.00	2368.10
0703503	1673.00	1422.05
0703499	1589.00	1350.65
0703504	1673.00	1422.05
0703500	1897.00	1612.45
0703501	2786.00	2368.10
0703498	1589.00	1350.65

6902



CAT40 & CAT50 V-Flange Shell Mill Holders

- Offers H6 arbor tolerance for less chatter and better tool life
- Lab certified for dimensional accuracy
- The taper is ground to AT3 tolerance for maximum spindle contact



CAT40					
Connection Diameter Workpiece Side	Protruding Length	Body Diameter	Order No.	Regular Price	SALE
1/2"	1.38"	1.45"	1229806	246.40	209.69
1/2"	4"	1.45"	1229807	345.80	294.28
3/4"	1.38"	1.69"	1229808	224.00	190.62
3/4"	4"	1.69"	1229809	298.20	253.76
3/4"	6"	1.69"	1229810	336.00	285.94
1"	2"	2.2"	1229812	224.00	190.62
1"	4"	2.2"	1229813	298.20	253.76
1"	6"	2.2"	1229814	336.00	285.94
1-1/4"	2.21"	2-3/4"	1229815	238.00	202.54
1-1/4"	4"	2-3/4"	1229816	336.00	285.94
1-1/4"	6"	3"	1229817	345.80	294.28
1-1/2"	2.21"	3.8"	1229818	263.20	223.99
1-1/2"	4"	3.8"	1229819	375.20	319.30

CAT50					
Connection Diameter Workpiece Side	Protruding Length	Body Diameter	Order No.	Regular Price	SALE
1/2"	1-1/2"	1.45"	1229820	345.80	294.28
3/4"	1-1/2"	2-3/4"	1229821	267.40	227.56
3/4"	3-1/2"	1.69"	1229823	345.80	294.28
3/4"	5-1/2"	1.69"	1229824	442.40	376.49
3/4"	8"	1.69"	1229825	548.80	467.03
3/4"	10"	1.69"	1229822	719.60	612.37
1"	2"	2.2"	1229826	277.20	235.90
1"	4"	2.2"	1229828	375.20	319.30
1"	6"	2.2"	1229829	481.60	409.84
1"	8"	2.2"	1229830	548.80	467.03
1"	10"	2.2"	1229827	719.60	612.37
1-1/4"	1-1/2"	2-3/4"	1229831	316.40	269.26
1-1/4"	3-1/2"	2-3/4"	1229832	375.20	319.30
1-1/4"	6"	2-3/4"	1229833	481.60	409.84
1-1/4"	8"	2-3/4"	1229834	586.60	499.20
1-1/2"	0.94"	3.8"	1229838	627.20	533.75
1-1/2"	2.41"	3.8"	1229835	316.40	269.26
1-1/2"	4"	3.8"	1229836	375.20	319.30
1-1/2"	6"	3.8"	1229837	481.60	409.84
2"	2.41"	4.88"	1229839	396.20	337.16
2"	4"	4.88"	1229840	705.60	600.46

7057



DX Series Crossover™ Vises

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



Jaw Width	Jaw Opening Capacity	Jaw Height	Overall Length	Model No	Order No.	Regular Price	SALE
4"	6.5"	1.235"	12.5"	DX4	0721735	1098.72	1043.78
6"	9.08"	1.735"	16.81"	DX6	0721736	1125.18	1068.93

1291

KLEIN TOOLS Deluxe Canvas Tool Bag

- Detachable shoulder strap can be adjusted for a perfect fit
- Made of heavy-duty natural canvas
- Moisture-resistant vinyl bottom with non-scratch studs on the base to protect against wear
- Steel frame mouth with hinge for rugged use



Number of Pockets	Width	Length	Height	Color	Manufacturer No	Order No.	Regular Price	SALE
10	6"	14"	10"	Brown/Tan	5102-14SP	1636677	198.69	157.84
13	6"	16"	14"	Brown/Tan	5102-16SP	1636679	196.33	155.96
13	6"	18"	14"	Brown/Tan	5102-18SP	1636681	201.14	159.78
17	6"	24"	15"	Brown/Tan	5102-24SP	1636683	219.65	174.50

2836



Split Head Hammers

Rawhide

- Will strike heavy, controlled blows without harm to materials or finishes
- The split head construction makes it especially easy to change faces; Just loosen nut under head



Head Diameter	Head Weight	Order No.	Regular Price	SALE
1 1/4"	1.5 lbs	0913550	123.29	104.80
1 1/2"	2 lbs	0913551	131.76	112.00
1 3/4"	2.75 lbs	0913552	158.31	134.56
2"	4 lbs	0913553	180.84	153.71
2 3/4"	6.5 lbs	0913554	273.25	232.26

2462

PRM PRO Cloth Wipers

- Recycled wiper cloths
- Made from cloth and flannel products
- White & color fabric



Description	25			50		
	Order No.	Regular Price	SALE	Order No.	Regular Price	SALE
Pure White T-Shirt Wipers New lint free absorbent material	0934966	181.51	145.39	0934967	363.03	290.79
Cotton terry cloth wipers absorbent reclaimed remnants assorted color/sizes	0934975	100.53	80.53	0934976	201.07	161.06
Colored T-Shirt wipers soft, absorbent, for polishing and wiping	0934968	63.29	50.69	0934969	126.59	101.40
Flannel wipers soft, absorbent, shirt/pajama material 100% cotton	0934971	93.97	75.26	0934972	262.50	195.70
Colored sweat shirt wipers soft, absorbent, for polishing and wiping	0934973	68.22	54.64	0934974	254.21	203.63
White reclaimed T-Shirt wipers authentic non-synthetic material	0934977	91.24	73.08	0934978	182.49	146.17

2889

PRC CHECK Tapered Bore Gage

- 1 to 15mm Range
- Handy gage for measuring cylindrical bores, bearing work, and for gaging slots
- Made from matte finished stainless steel
- Clearly etched graduations for precise measurement



Order No.	Regular Price	SALE
1083314	13.45	8.76

2094

Prices Effective July 1 through September 30, 2026

Not all items exactly as pictured. Not responsible for typographical errors. We reserve the right to limit quantities. Items available while supplies last. Promotional pricing does not include tariffs