



**VIKING DRILL & TOOL**

**Drill Bits Information**

**Dia® Surface Treated.** For specially treated drills with black finish. Imparts lubricant effect, prevents chip welding in flutes, imparts abrasion resistance.

**Brite-Flute®.** For drills with brite finish. For normal nonferrous drilling applications.

**Surface Treated Flutes.** Bright lands and black finish flutes.

**Gold Finish.** Low temperature stress relieving treatment. For cobalt and super premium steel drills, taps, dies, reamers. Provides deep gold color on steel surface.

**Titanium Nitride.** Hard coating. Bright gold color. Improves drill resistance. Before re-sharpening, drill life may increase 500% compared to similar uncoated drill.

Complete Information Available on Request.

**VIKING DRILL & TOOL**

**Twist Drill Bits**

**Troubleshooting - Information**

Cause	Correction
<b>Broken Drill</b>	
1. Flutes clogged w/chips, drill binds in hole (common in deep holes)	— Use drill w/wider flutes and/or faster helix angle — Consider polished flutes — Withdraw drill regularly — Consider heavier feeds or chip breaker design
2. Drill binding due to worn outer corners	— Repoint or replace drill — Check for excessive speed, inadequate or incorrect coolant, excessive run out as drill enters work
3. Work insecurely held	— Use adequate holding or clamping devices
4. Excessive feed	— Reduce feed
5. Improper point	— Check for correct lip clearance — Use proper drill type and point
6. Dull drill	— Replace before dulling occurs. Check feeds, speeds and No. 5 for premature dulling.

**Broken Tang**

1. Shank or socket damaged	— Repair or replace
2. Drill not seated in socket	— Check for positive, secure fit

**Chips Not Breaking Up**

1. Insufficient feed	— Increase feed
2. Improper style drill and/or point	— Consider use of chip-breaker design drill and/or chip-breaker point grind

**Damaged Point**

1. Using hard object to tap drill into socket	— Use soft lead, brass or plastic hammer
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Cause	Correction
2. Dropping, mishandling drill	— Handle with care

**Oversize Hole**

1. Drill point off center	— Repoint accurately or replace w/properly pointed drill
2. Machine spindle not rigid or not running true	— Repair if possible; consider use of bushing
3. Work piece loose and/or vibrating	— Tighten and hold securely

**Rough Hole**

1. Incorrect point grind and/or dull drill	— Repoint or replace w/properly pointed drill
2. Excessive feed	— Reduce feed
3. Incorrect or insufficient coolant	— Correct and adjust

**Poor Tool Life**

1. Coolant not reaching drill point or insufficient or incorrect coolant	— Correct and adjust
2. Speed too high and/or feed too low	— Review and adjust
3. Wrong type of point and/or drill application	— Review requirements and conditions

**Web Splits**

1. Insufficient lip clearance	— Repoint or replace w/properly pointed drill
2. Point thinned too much	— Repoint or replace w/properly pointed drill
3. Excessive feed	— Reduce feed

**Chipped Lips**

1. Excessive lip clearance and/or heel relief	— Repoint or replace w/properly pointed drill
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**Broken Outer Corners**

3. Incorrect or insufficient coolant	— Reduce speed
2. Excessive speed	— Repoint or replace w/properly pointed drill
3. Scale, hard spots encountered in material	— No final remedy if condition prevalent; lower feeds and speeds may help

Complete Information Available on Request.

**DRILL BLANKS**

**List No. 950D**

Made from hardened (Rc 63-65) high speed steel and ground. Used as punches, gauges, pins or ground for special tools. Tolerance limit to 1/2" +.0000"/-.0003", to 1" +.0000"/-.0005"

Size	Dec. Equiv. In.	OA Lgth. In.
1/64"	.0156	3/4
1/32"	.0312	1 3/8
3/64"	.0469	1 3/4
1/16"	.0625	1 7/8
5/64"	.0781	2
3/32"	.0938	2 1/4
7/64"	.1094	2 5/8

Size	Dec. Equiv. In.	OA Lgth. In.
1/8"	.1250	2 3/4
9/64"	.1406	2 7/8
5/32"	.1562	3 1/8
11/64"	.1719	3 1/4
3/16"	.1875	3 1/2
13/64"	.2031	3 5/8
7/32"	.2188	3 3/4
15/64"	.2344	3 7/8
1/4"	.2500	4
17/64"	.2656	4 1/8
9/32"	.2812	4 1/4
19/64"	.2969	4 3/8
5/16"	.3125	4 1/2
21/64"	.3281	4 5/8
11/32"	.3438	4 3/4
23/64"	.3594	4 7/8
3/8"	.3750	5
25/64"	.3906	5 1/8
13/32"	.4062	5 1/4
27/64"	.4219	5 3/8
7/16"	.4375	5 1/2
29/64"	.4531	5 5/8
15/32"	.4688	5 3/4
31/64"	.4844	5 7/8
1/2"	.5000	6
33/64"	.5156	6
17/32"	.5312	6
35/64"	.5469	6
9/16"	.5625	6
37/64"	.5781	6
19/32"	.5938	6
39/64"	.6094	6
5/8"	.6250	6
41/64"	.6406	6
21/32"	.6562	6
43/64"	.6719	6
11/16"	.6875	6
45/64"	.7031	6
23/32"	.7188	6
47/64"	.7344	6
3/4"	.7500	6
49/64"	.7656	6
25/32"	.7812	6
51/64"	.7969	6
13/16"	.8125	6
53/64"	.8281	6
27/32"	.8438	6
55/64"	.8594	6
7/8"	.8750	6
57/64"	.8906	6
29/32"	.9062	6
59/64"	.9219	6
15/16"	.9375	6
61/64"	.9531	6
31/32"	.9688	6
63/64"	.9844	6
1"	1.0000	6

**Letter Sizes**

A	.2340	3 7/8
B	.2380	4
C	.2420	4
D	.2460	4
E	.2500	4
F	.2570	4 1/8
G	.2610	4 1/8
H	.2660	4 1/8
I	.2720	4 1/8
J	.2770	4 1/8
K	.2810	4 1/4
L	.2900	4 1/4
M	.2950	4 3/8
N	.3020	4 3/8
O	.3160	4 1/2
P	.3230	4 5/8
Q	.3320	4 3/4
R	.3390	4 3/4
S	.3480	4 7/8
T	.3580	4 7/8

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Size	Dec. Equiv. In.	OA Lgth. In.
U	.3680	5
V	.3770	5
W	.3860	5 1/8
X	.3970	5 1/8
Y	.4040	5 1/4
Z	.4130	5 1/4
<b>Wire Gauge Sizes</b>		
1	.2280	3 7/8
2	.2210	3 7/8
3	.2130	3 3/4
4	.2090	3 3/4
5	.2055	3 3/4
6	.2040	3 3/4
7	.2010	3 3/8
8	.1990	3 5/8
9	.1960	3 3/8
10	.1935	3 3/8
11	.1910	3 1/2
12	.1890	3 1/2
13	.1850	3 1/2
14	.1820	3 3/8
15	.1800	3 3/8
16	.1770	3 3/8
17	.1730	3 3/8
18	.1695	3 1/4
19	.1660	3 1/4
20	.1610	3 1/4
21	.1590	3 1/4
22	.1570	3 1/8
23	.1540	3 1/8
24	.1520	3 1/8
25	.1495	3
26	.1470	3
27	.1440	3
28	.1405	2 7/8
29	.1360	2 7/8
30	.1285	2 3/4
31	.1200	2 3/4
32	.1160	2 3/4
33	.1130	2 3/8
34	.1110	2 3/8
35	.1100	2 3/8
36	.1065	2 1/2
37	.1040	2 1/2
38	.1015	2 1/2
39	.0995	2 3/8
40	.0980	2 3/8
41	.0960	2 3/8
42	.0935	2 1/4
43	.0890	2 1/4
44	.0860	2 1/8
45	.0820	2 1/8
46	.0810	2 1/8
47	.0785	2
48	.0760	2
49	.0730	2
50	.0700	2
51	.0670	2
52	.0635	1 7/8
53	.0595	1 7/8
54	.0550	1 7/8
55	.0520	1 7/8
56	.0465	1 3/4
57	.0430	1 3/4
58	.0420	1 3/8
59	.0410	1 3/8
60	.0400	1 3/8
61	.0390	1 3/8
62	.0380	1 1/2
63	.0370	1 1/2
64	.0360	1 1/2
65	.0350	1 1/2
66	.0330	1 3/8
67	.0320	1 3/8
68	.0310	1 3/8
69	.0292	1 3/8
70	.0280	1 1/4
71	.0260	1 1/4

Size	Dec. Equiv. In.	OA Lgth. In.
72	.0250	1 1/8
73	.0240	1 1/8
74	.0225	1
75	.0210	1
76	.0200	7/8
77	.0180	7/8
78	.0160	7/8
79	.0145	3/4
80	.0135	3/4

Complete Information Available on Request.

**REAMER BLANKS**  
List No. 950R

Made from hardened (Rc 63-65) high speed steel and ground. Used as punches, gauges, pins or ground for special tools. Tolerance limits +.0002"/-.0000".

Size	Dec. Equiv. In.	OA Lgth. In.
<b>Inch Sizes</b>		
1/64"	.0156	3/4
1/32"	.0312	1 1/8
3/64"	.0469	1 3/4
1/16"	.0625	1 7/8
5/64"	.0781	2
3/32"	.0938	2 1/4
7/64"	.1094	2 5/8
1/8"	.1250	2 3/4
9/64"	.1406	2 7/8
5/32"	.1562	3 1/8
11/64"	.1719	3 1/4
3/16"	.1875	3 1/2
13/64"	.2031	3 3/8
7/32"	.2188	3 3/4
15/64"	.2344	3 7/8
1/4"	.2500	4
17/64"	.2656	4 1/8
9/32"	.2812	4 1/4
19/64"	.2969	4 3/8
5/16"	.3125	4 1/2
21/64"	.3281	4 5/8
11/32"	.3438	4 3/4
23/64"	.3594	4 7/8
3/8"	.3750	5
25/64"	.3906	5 1/8
13/32"	.4062	5 1/4
27/64"	.4219	5 3/8
7/16"	.4375	5 1/2
29/64"	.4531	5 5/8
15/32"	.4688	5 3/4
31/64"	.4844	5 7/8
1/2"	.5000	6
33/64"	.5156	6
17/32"	.5312	6
35/64"	.5469	6
9/16"	.5625	6
37/64"	.5781	6
19/32"	.5938	6
39/64"	.6094	6
5/8"	.6250	6
41/64"	.6406	6
21/32"	.6562	6
43/64"	.6719	6
11/16"	.6875	6
45/64"	.7031	6
23/32"	.7188	6
47/64"	.7344	6
3/4"	.7500	6
49/64"	.7656	6
25/32"	.7812	6
51/64"	.7969	6

Size	Dec. Equiv. In.	OA Lgth. In.
1 3/16"	.8125	6
53/64"	.8281	6
27/32"	.8438	6
55/64"	.8594	6
7/8"	.8750	6
57/64"	.8906	6
29/32"	.9062	6
59/64"	.9219	6
15/16"	.9375	6
61/64"	.9531	6
31/32"	.9688	6
63/64"	.9844	6
1"	1.0000	6

**Letter Sizes**

A	.2340	3 7/8
B	.2380	4
C	.2420	4
D	.2460	4
E	.2500	4
F	.2570	4 1/8
G	.2610	4 1/8
H	.2660	4 1/8
I	.2720	4 1/8
J	.2770	4 1/8
K	.2810	4 1/4
L	.2900	4 1/4
M	.2950	4 3/8
N	.3020	4 3/8
O	.3160	4 1/2
P	.3230	4 3/8
Q	.3320	4 3/4
R	.3390	4 3/4
S	.3480	4 7/8
T	.3580	4 7/8
U	.3680	5
V	.3770	5
W	.3860	5 1/8
X	.3970	5 1/8
Y	.4040	5 1/4
Z	.4130	5 1/4

**Wire Gauge Sizes**

1	.2280	3 7/8
2	.2210	3 7/8
3	.2130	3 3/4
4	.2090	3 3/4
5	.2055	3 3/4
6	.2040	3 3/4
7	.2010	3 3/8
8	.1990	3 3/8
9	.1960	3 3/8
10	.1935	3 3/8
11	.1910	3 1/2
12	.1890	3 1/2
13	.1850	3 1/2
14	.1820	3 3/8
15	.1800	3 3/8
16	.1770	3 3/8
17	.1730	3 3/8
18	.1695	3 1/4
19	.1660	3 1/4
20	.1610	3 1/4
21	.1590	3 1/4
22	.1570	3 1/8
23	.1540	3 1/8
24	.1520	3 1/8
25	.1495	3
26	.1470	3
27	.1440	3
28	.1405	2 7/8
29	.1360	2 7/8
30	.1285	2 3/4
31	.1200	2 3/4
32	.1160	2 3/4
33	.1130	2 3/8
34	.1110	2 3/8
35	.1100	2 3/8
36	.1065	2 1/2

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Size	Dec. Equiv. In.	OA Lgth. In.
37	.1040	2 1/2
38	.1015	2 1/2
39	.0995	2 3/8
40	.0980	2 3/8
41	.0960	2 3/8
42	.0935	2 1/4
43	.0890	2 1/4
44	.0860	2 1/8
45	.0820	2 1/8
46	.0810	2 1/8
47	.0785	2
48	.0760	2
49	.0730	2
50	.0700	2
51	.0670	2
52	.0635	1 7/8
53	.0595	1 7/8
54	.0550	1 7/8
55	.0520	1 7/8
56	.0465	1 3/4
57	.0430	1 3/4
58	.0420	1 3/8
59	.0410	1 3/8
60	.0400	1 3/8
61	.0390	1 3/8
62	.0380	1 1/2
63	.0370	1 1/2
64	.0360	1 1/2
65	.0350	1 1/2
66	.0330	1 3/8
67	.0320	1 3/8
68	.0310	1 3/8
69	.0292	1 3/8
70	.0280	1 1/4
71	.0260	1 1/4
72	.0250	1 1/8
73	.0240	1 1/8
74	.0225	1
75	.0210	1
76	.0200	7/8
77	.0180	7/8
78	.0160	7/8
79	.0145	3/4
80	.0135	3/4

Complete Information Available on Request.

**VIKING DRILL & TOOL**  
Drill Bits

Taper Length - Type 210



High speed steel. Brite-Flute® through 3/4" diameter. General purpose. 118° point. For mild drilling where extra long drills required.

No.	Dia. In.	OA Lgth. In.	Flute Lgth. In.	Pkg. Qty.
4RDTL	3/64	2 1/4	1 1/8	12
6RDTL	1/16	3	1 3/4	12
7RDTL	5/64	3 3/4	2	12
9RDTL	3/32	4 1/4	2 1/4	12
10RDTL	7/64	4 3/8	2 1/2	12
12RDTL	1/8	5 1/8	2 3/4	12
14RDTL	9/64	5 3/8	3	12
15RDTL	5/32	5 3/8	3	12
17RDTL	11/64	5 3/4	3 3/8	12
18RDTL	3/16	5 3/4	3 3/8	12
20RDTL	13/64	6	3 3/8	12
21RDTL	7/32	6	3 3/8	12
23RDTL	15/64	6 1/8	3 3/4	12
25RDTL	1/4	6 1/8	3 3/4	12
26RDTL	17/64	6 1/4	3 7/8	12
28RDTL	9/32	6 1/4	3 7/8	12
29RDTL	19/64	6 3/8	4	6
31RDTL	5/16	6 3/8	4	6

No.	Dia. In.	OA Lgth. In.	Flute Lgth. In.	Pkg. Qty.
32RDTL	21/64	6 1/2	4 1/8	6
34RDTL	11/32	6 1/2	4 1/8	6
35RDTL	23/64	6 3/4	4 1/4	6
37RDTL	3/8	6 3/4	4 1/4	6
39RDTL	25/64	7	4 3/8	1
40RDTL	13/32	7	4 3/8	1
42RDTL	27/64	7 1/4	4 5/8	1
43RDTL	7/16	7 1/4	4 5/8	1
45RDTL	29/64	7 1/2	4 3/4	1
46RDTL	15/32	7 1/2	4 3/4	1
48RDTL	31/64	7 3/4	4 3/4	1
50RDTL	1/2	7 3/4	4 3/4	1

**VIKING DRILL & TOOL**

Jobbers Length Drills  
Automotive Series - Type 230

General purpose Tang Drive. Dia.® surface treated. For use with A.S.A split sleeve drill drivers.

No.	Fract. Wire, Letter & Metric	Flute Lgth. In.	OA Lgth. In.	Pkg. Qty.
.....	30	1 5/8	2 3/4	12
.....	3.30 mm	1 3/4	2 7/8	12
.....	29	1 3/4	2 7/8	12
.....	9/64	1 3/4	2 7/8	12
.....	27	1 7/8	3	12
.....	26	1 7/8	3	12
.....	24	2	3 1/8	12
.....	5/32	2	3 1/8	12
.....	20	2 1/8	3 1/4	12
.....	19	2 1/8	3 1/4	12
.....	18	2 1/8	3 1/4	12
.....	1 1/64	2 1/8	3 1/4	12
.....	17	2 3/16	3 3/8	12
.....	16	2 3/16	3 3/8	12
.....	15	2 3/16	3 3/8	12
.....	13	2 5/16	3 1/2	12
.....	3/16	2 5/16	3 1/2	12
.....	11	2 5/16	3 1/2	12
.....	10	2 7/16	3 3/8	12
.....	9	2 7/16	3 3/8	12
.....	4	2 1/2	3 3/4	12
.....	3	2 1/2	3 3/4	12
.....	7/32	2 1/2	3 3/4	12
.....	5.70 mm	2 5/8	3 7/8	12
.....	1	2 5/8	3 7/8	12
.....	15/64	2 5/8	3 7/8	12
.....	6.10 mm	2 3/4	4	12
.....	D	2 3/4	4	12
.....	1/4	2 3/4	4	12
.....	6.40	2 7/8	4 1/8	12
.....	F	2 7/8	4 1/8	12
.....	G	2 7/8	4 1/8	12
.....	17/64	2 7/8	4 1/8	12
.....	I	2 7/8	4 1/8	12
.....	J	2 7/8	4 1/8	12
.....	9/32	2 15/16	4 1/4	12
.....	7.25 mm	2 15/16	4 1/4	6
.....	7.40 mm	3 1/16	4 3/8	6
.....	19/64	3 1/16	4 3/8	6
.....	N	3 1/16	4 3/8	6
.....	7.80 mm	3 3/16	4 1/2	6
.....	5/16	3 3/16	4 1/2	6
.....	O	3 3/16	4 1/2	6
.....	P	3 5/16	4 5/8	6
.....	21/64	3 5/16	4 5/8	6
.....	Q	3 7/16	4 3/4	6
.....	R	3 7/16	4 3/4	6
.....	11/32	3 7/16	4 3/4	6
.....	S	3 1/2	4 7/8	6
.....	9.00 mm	3 1/2	4 7/8	6
.....	23/64	3 1/2	4 7/8	6
.....	U	3 5/8	5	6
.....	3/8	3 5/8	5	6
.....	W	3 3/4	5 1/8	6

No.	Fract. Wire, Letter & Metric	Flute Lgth. In.	OA Lgth. In.	Pkg. Qty.
.....	25/64	3 3/4	5 1/8	6
.....	X	3 3/4	5 1/8	6
.....	13/32	3 7/8	5 1/4	6
.....	27/64	3 15/16	5 3/8	6
43RDJA	7/16	4 1/16	5 1/2	6
.....	29/64	4 3/16	5 5/8	6
.....	15/32	4 5/16	5 3/4	6
.....	31/64	4 3/8	5 7/8	6
.....	1/2	4 1/2	6	6
.....	33/64	4 13/16	6 5/8	1
.....	17/32	4 13/16	6 5/8	1
.....	35/64	4 13/16	6 5/8	1
.....	9/16	4 13/16	6 5/8	1
.....	37/64	4 13/16	6 5/8	1
.....	19/32	5 1/16	7 1/8	1
.....	39/64	5 3/16	7 1/8	1
.....	5/8	5 3/16	7 1/8	1
.....	41/64	5 1/16	7 1/8	1
.....	21/32	5 3/16	7 1/8	1
.....	43/64	5 5/8	7 5/8	1
.....	11/16	5 5/8	7 5/8	1

**VIKING DRILL & TOOL**

Jobbers Length Drill Bits  
Type 240



High speed steel. Dia.® surface treated. General purpose, 118° point. For use under wire variety of drilling conditions. Point, feeds or speeds may be altered for different uses. Surface treatment prevents chip welding, improves chip flow and increases abrasion resistance.

No.	Dia. In.	Dec. Equiv. In.	OA Lgth. In.	Flute Lgth. In.	Pkg. Qty.
1RDJO	1/64	.0156	3/4	3/16	12
3RDJO	1/32	.0312	1 1/8	1/2	12
4RDJO	3/64	.0469	1 3/4	3/4	12
6RDJO	1/16	.0625	1 7/8	7/8	12
7RDJO	5/64	.0781	2	1	12
9RDJO	3/32	.0938	2 1/4	1 1/4	12
10RDJO	7/64	.1094	2 5/8	1 1/2	12
12RDJO	1/8	.1250	2 3/4	1 5/8	12
14RDJO	9/64	.1406	2 7/8	1 3/4	12
15RDJO	5/32	.1562	3 1/8	2	12
17RDJO	11/64	.1719	3 1/4	2 1/8	12
18RDJO	3/16	.1875	3 1/2	2 3/16	12
20RDJO	13/64	.2031	3 5/8	2 7/16	12
21RDJO	7/32	.2188	3 3/4	2 1/2	12
23RDJO	15/64	.2344	3 7/8	2 5/8	12
25RDJO	1/4	.2500	4	2 3/4	12
26RDJO	17/64	.2656	4 1/8	2 7/8	12
28RDJO	9/32	.2812	4 1/4	2 15/16	12
29RDJO	19/64	.2969	4 3/8	3 1/16	6
31RDJO	5/16	.3125	4 1/2	3 3/16	6
32RDJO	21/64	.3281	4 5/8	3 5/16	6
34RDJO	11/32	.3438	4 3/4	3 7/16	6
35RDJO	23/64	.3594	4 7/8	3 1/2	6
37RDJO	3/8	.3750	5	3 5/8	6
39RDJO	25/64	.3906	5 1/8	3 3/4	6
40RDJO	13/32	.4062	5 1/4	3 7/8	6
42RDJO	27/64	.4219	5 3/8	3 15/16	6
43RDJO	7/16	.4375	5 1/2	4 1/16	6
45RDJO	29/64	.4531	5 5/8	4 3/16	6
46RDJO	15/32	.4688	5 3/4	4 5/16	6
48RDJO	31/64	.4844	5 7/8	4 3/8	6
50RDJO	1/2	.5000	6	4 1/2	6
51RDJO	33/64	.5156	6 5/8	4 13/16	1
53RDJO	17/32	.5312	6 5/8	4 13/16	1
54RDJO	35/64	.5469	6 5/8	4 13/16	1
56RDJO	9/16	.5625	6 5/8	4 13/16	1
57RDJO	37/64	.5781	6 5/8	4 13/16	1

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6863 Commerce Drive  
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Hubbard, Ohio 44425

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Continued from previous page

No.	Dia. In.	Dec. Equiv. In.	OA Lgth. In.	Flute Lgth. In.	Pkg. Qty.
59RDJO	19/32	.5938	7/8	5 3/16	1
60RDJO	39/64	.6094	7/8	5 3/16	1
62RDJO	5/8	.6250	7/8	5 3/16	1
64RDJO	41/64	.6406	7/8	5 3/16	1
65RDJO	21/32	.6562	7/8	5 3/16	1
67RDJO	43/64	.6719	7/8	5 3/16	1
68RDJO	11/16	.6875	7/8	5 3/16	1

Letter

No.	Letter Size	Dec. Equiv. In.	OA Lgth. In.	Flute Lgth. In.	Pkg. Qty.
1ZDJJO	A	.234	3/8	2 5/8	12
2ZDJJO	B	.238	4	2 3/4	12
3ZDJJO	C	.242	4	2 3/4	12
4ZDJJO	D	.246	4	2 3/4	12
5ZDJJO	E	.250	4	2 3/4	12
6ZDJJO	F	.257	4 1/8	2 7/8	12
7ZDJJO	G	.261	4 1/8	2 7/8	12
8ZDJJO	H	.266	4 1/8	2 7/8	12
9ZDJJO	I	.272	4 1/8	2 7/8	12
10ZDJJO	J	.277	4 1/8	2 7/8	12
11ZDJJO	K	.281	4 1/4	2 15/16	12
12ZDJJO	L	.290	4 1/4	2 15/16	12
13ZDJJO	M	.295	4 3/8	3 1/16	6
14ZDJJO	N	.302	4 3/8	3 1/16	6
15ZDJJO	O	.316	4 1/2	3 3/16	6
16ZDJJO	P	.323	4 3/8	3 1/16	6
17ZDJJO	Q	.332	4 3/4	3 7/16	6
18ZDJJO	R	.339	4 3/4	3 7/16	6
19ZDJJO	S	.348	4 7/8	3 1/2	6
20ZDJJO	T	.358	4 7/8	3 1/2	6
21ZDJJO	U	.368	5	3 5/8	6
22ZDJJO	V	.377	5	3 5/8	6
23ZDJJO	W	.386	5 1/8	3 3/4	6
24ZDJJO	X	.397	5 1/8	3 3/4	6
25ZDJJO	Y	.404	5 1/4	3 7/8	6
26ZDJJO	Z	.413	5 1/4	3 7/8	6

Wire Gauge

No.	Wire Gauge No.	Dec. Equiv. In.	OA Lgth. In.	Flute Lgth. In.	Pkg. Qty.
1DDJO	1	.2280	3/8	2 5/8	12
2DDJO	2	.2210	3/8	2 5/8	12
3DDJO	3	.2130	3/4	2 1/2	12
4DDJO	4	.2090	3/4	2 1/2	12
5DDJO	5	.2055	3/4	2 1/2	12
6DDJO	6	.2040	3/4	2 1/2	12
7DDJO	7	.2010	3/8	2 1/16	12
8DDJO	8	.1990	3/8	2 1/16	12
9DDJO	9	.1960	3/8	2 1/16	12
10DDJO	10	.1935	3/8	2 1/16	12
11DDJO	11	.1910	3/2	2 5/16	12
12DDJO	12	.1890	3 1/2	2 5/16	12
13DDJO	13	.1850	3 1/2	2 5/16	12
14DDJO	14	.1820	3 3/8	2 3/16	12
15DDJO	15	.1800	3 3/8	2 3/16	12
16DDJO	16	.1770	3 3/8	2 3/16	12
17DDJO	17	.1730	3 3/8	2 3/16	12
18DDJO	18	.1695	3 1/4	2 1/8	12
19DDJO	19	.1660	3 1/4	2 1/8	12
20DDJO	20	.1610	3 1/4	2 1/8	12
21DDJO	21	.1590	3 1/4	2 1/8	12
22DDJO	22	.1570	3 1/8	2	12
23DDJO	23	.1540	3 1/8	2	12
24DDJO	24	.1520	3 1/8	2	12
25DDJO	25	.1495	3	1 7/8	12
26DDJO	26	.1470	3	1 7/8	12
27DDJO	27	.1440	3	1 7/8	12
28DDJO	28	.1405	2 7/8	1 3/4	12
29DDJO	29	.1360	2 7/8	1 3/4	12
30DDJO	30	.1285	2 3/4	1 5/8	12
31DDJO	31	.1200	2 3/4	1 5/8	12
32DDJO	32	.1160	2 3/4	1 5/8	12
33DDJO	33	.1130	2 5/8	1 1/2	12
34DDJO	34	.1110	2 5/8	1 1/2	12
35DDJO	35	.1100	2 5/8	1 1/2	12
36DDJO	36	.1065	2 1/2	1 1/16	12

No.	Wire Gauge No.	Dec. Equiv. In.	OA Lgth. In.	Flute Lgth. In.	Pkg. Qty.
37DDJO	37	.1040	2 1/2	1 7/16	12
38DDJO	38	.1015	2 1/2	1 7/16	12
39DDJO	39	.0995	2 3/8	1 3/8	12
40DDJO	40	.0980	2 3/8	1 3/8	12
41DDJO	41	.0960	2 3/8	1 3/8	12
42DDJO	42	.0935	2 1/4	1 1/4	12
43DDJO	43	.0890	2 1/4	1 1/4	12
44DDJO	44	.0860	2 1/8	1 1/8	12
45DDJO	45	.0820	2 1/8	1 1/8	12
46DDJO	46	.0810	2 1/8	1 1/8	12
47DDJO	47	.0785	2	1	12
48DDJO	48	.0760	2	1	12
49DDJO	49	.0730	2	1	12
50DDJO	50	.0700	2	1	12
51DDJO	51	.0670	2	1	12
52DDJO	52	.0635	1 7/8	7/8	12
53DDJO	53	.0595	1 7/8	7/8	12
54DDJO	54	.0550	1 7/8	7/8	12
55DDJO	55	.0520	1 7/8	7/8	12
56DDJO	56	.0465	1 3/4	3/4	12
57DDJO	57	.0430	1 3/4	3/4	12
58DDJO	58	.0420	1 5/8	1 1/16	12
59DDJO	59	.0410	1 5/8	1 1/16	12

Sets

No.	Desc.
B-10	10 Pieces
B-11	11 Pieces
B-13	13 Pieces
B-15	17 Pieces
B-20	20 Pieces
B-21	21 Pieces
B-26	26 Pieces
B-29	29 Pieces
B-60	60 Pieces
B-115	115 Pieces

VIKING DRILL & TOOL  
Jobbers Length Drill Bits  
Type 240-A - Heavy Duty



Dia® surface treated. 135° split point. Self centering. Use in medium hardness metal drilling applications.

No.	Dia. In.	OA Lgth. In.	Flute Lgth. In.	Pkg. Qty.
6RDJH	1/16	1 7/8	7/8	12
7RDJH	9/64	2	1	12
9RDJH	3/32	2 1/4	1 1/4	12
10RDJH	7/64	2 5/8	1 1/2	12
12RDJH	1/8	2 3/4	1 5/8	12
14RDJH	9/64	2 7/8	1 3/4	12
15RDJH	5/32	3 1/8	2	12
17RDJH	1 1/64	3 1/4	2 1/8	12
18RDJH	3/16	3 1/2	2 5/16	12
20RDJH	1 3/64	3 5/8	2 7/16	12
21RDJH	7/32	3 3/4	2 1/2	12
23RDJH	1 5/64	3 3/8	2 5/8	12
25RDJH	1/4	4	2 3/4	12
26RDJH	1 7/64	4 1/8	2 7/8	12
28RDJH	9/32	4 1/4	2 15/16	12
29RDJH	1 9/64	4 3/8	3 1/16	6
31RDJH	5/16	4 1/2	3 3/16	6
32RDJH	2 1/64	4 5/8	3 5/16	6
34RDJH	1 1/32	4 3/4	3 7/16	6
35RDJH	2 3/64	4 7/8	3 1/2	6
37RDJH	3/8	5	3 5/8	6
39RDJH	2 5/64	5 1/8	3 3/4	6
40RDJH	1 3/32	5 1/4	3 7/8	6
42RDJH	2 7/64	5 3/8	3 15/16	6
43RDJH	7/16	5 1/2	4 1/16	6
45RDJH	2 9/64	5 5/8	4 3/16	6
46RDJH	1 5/32	5 3/4	4 5/16	6
48RDJH	3 1/64	5 7/8	4 3/8	6
50RDJH	1/2	6	4 1/2	6

VIKING DRILL & TOOL  
Jobbers Length Drill Bits  
Brite-Flute® - Type 240-B



General purpose. 118° point. High speed steel. Use on nonferrous metals, wood and plastics.

No.	Dia. In.	OA Lgth. In.	Flute Lgth. In.	Pkg. Qty.
1RDJB	1/64	3/4	3/16	12
3RDJB	1/32	1 3/8	1/2	12
4RDJB	3/64	1 3/4	3/4	12
6RDJB	1/16	1 7/8	7/8	12
7RDJB	5/64	2	1	12
9RDJB	3/32	2 1/4	1 1/4	12
10RDJB	7/64	2 5/8	1 1/2	12
12RDJB	1/8	2 3/4	1 5/8	12
14RDJB	9/64	2 7/8	1 3/4	12
15RDJB	5/32	3 1/8	2	12
17RDJB	1 1/64	3 1/4	2 1/8	12
18RDJB	3/16	3 1/2	2 5/16	12
20RDJB	1 3/64	3 3/8	2 1/16	12
21RDJB	7/32	3 3/4	2 1/2	12
23RDJB	1 5/64	3 7/8	2 5/8	12
25RDJB	1/4	4	2 3/4	12
26RDJB	1 7/64	4 1/8	2 7/8	12
28RDJB	9/32	4 1/4	2 15/16	12
29RDJB	1 9/64	4 3/8	3 1/16	6
31RDJB	5/16	4 1/2	3 1/16	6
32RDJB	2 1/64	4 5/8	3 5/16	6
34RDJB	1 1/32	4 3/4	3 7/16	6
35RDJB	2 3/64	4 7/8	3 1/2	6
37RDJB	3/8	5	3 5/8	6
39RDJB	2 5/64	5 1/8	3 3/4	6
40RDJB	1 3/32	5 1/4	3 7/8	6
42RDJB	2 7/64	5 3/8	3 15/16	6
43RDJB	7/16	5 1/2	4 1/16	6
45RDJB	2 9/64	5 5/8	4 3/16	6
46RDJB	1 5/32	5 3/4	4 5/16	6
48RDJB	3 1/64	5 7/8	4 3/8	6
50RDJB	1/2	6	4 1/2	6

VIKING DRILL & TOOL  
Jobbers Length Drills  
Type 240-D



Super cobalt high speed steel. Gold finish. Heavy duty, 135° split point on all but #52 and sizes smaller than 1/16". Made to Type J aircraft specifications. For use in drilling hard, tough metals, free machining grades of stainless steels, iron-based and titanium alloys and certain abrasive plastics. High red hardness permits speeds 30% over regular high speed steel drills. Must be used with rigidly held, positive feed, drilling equipment. Packaging: 3/64"-9/32", A-L, and #1-#60, twelve per package. 1 9/64"-1/2" and M-Z, six per package.

Fractional

No.	Dia. In.	Dec. Equiv. In.	OA Lgth. In.	Flute Lgth. In.
4RDJC	3/64	.0469	1 3/4	3/4
6RDJC	1/16	.0625	1 7/8	7/8
7RDJC	5/64	.0871	2	1
9RDJC	3/32	.0938	2 1/4	1 1/4
10RDJC	7/64	.1094	2 5/8	1 1/2
12RDJC	1/8	.1250	2 3/4	1 5/8
14RDJC	9/64	.1406	2 7/8	1 3/4

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No.	Dia. In.	Dec. Equiv. In.	OA Lgth. In.	Flute Lgth. In.
15RDJC	5/32	.1562	3/8	2
17RDJC	11/64	.1719	3/4	2 1/8
18RDJC	3/16	.1875	3 1/2	2 5/16
20RDJC	13/64	.2031	3 5/8	2 7/16
21RDJC	7/32	.2188	3 3/4	2 1/2
23RDJC	15/64	.2344	3 7/8	2 5/8
25RDJC	1/4	.2500	4	2 3/4
26RDJC	17/64	.2656	4 1/8	2 7/8
28RDJC	9/32	.2812	4 1/4	2 9/16
29RDJC	19/64	.2969	4 3/8	3 1/16
31RDJC	5/16	.3125	4 1/2	3 3/16
32RDJC	21/64	.3281	4 5/8	3 5/16
34RDJC	11/32	.3438	4 3/4	3 7/16
35RDJC	23/64	.3594	4 7/8	3 1/2
37RDJC	3/8	.3750	5	3 5/8
39RDJC	25/64	.3906	5 1/8	3 3/4
40RDJC	13/32	.4062	5 1/4	3 7/8
42RDJC	27/64	.4219	5 3/8	3 15/16
43RDJC	7/16	.4375	5 1/2	4 1/16
45RDJC	29/64	.4531	5 5/8	4 3/16
46RDJC	15/32	.4688	5 3/4	4 5/16
48RDJC	31/64	.4844	5 7/8	4 3/8
50RDJC	1/2	.5000	6	4 1/2

Letter

No.	Letter Size	Dec. Equiv. In.	OA Lgth. In.	Flute Lgth. In.
1ZDJC	A	.234	3 7/8	2 5/8
2ZDJC	B	.238	4	2 3/4
3ZDJC	C	.242	4	2 3/4
4ZDJC	D	.246	4	2 3/4
5ZDJC	E	.250	4	2 3/4
6ZDJC	F	.257	4 1/8	2 7/8
7ZDJC	G	.261	4 1/8	2 7/8
8ZDJC	H	.266	4 1/8	2 7/8
9ZDJC	I	.272	4 1/8	2 7/8
10ZDJC	J	.277	4 1/8	2 7/8
11ZDJC	K	.281	4 1/4	2 9/16
12ZDJC	L	.290	4 1/4	2 9/16
13ZDJC	M	.295	4 3/8	3 1/16
14ZDJC	N	.302	4 3/8	3 1/16
15ZDJC	O	.316	4 1/2	3 3/16
16ZDJC	P	.323	4 5/8	3 5/16
17ZDJC	Q	.332	4 3/4	3 7/16
18ZDJC	R	.339	4 3/4	3 7/16
19ZDJC	S	.348	4 7/8	3 1/2
20ZDJC	T	.358	4 7/8	3 1/2
21ZDJC	U	.368	5	3 5/8
22ZDJC	V	.377	5	3 5/8
23ZDJC	W	.386	5 1/8	3 3/4
24ZDJC	X	.397	5 1/8	3 3/4
25ZDJC	Y	.404	5 1/4	3 3/8
26ZDJC	Z	.413	5 1/4	3 3/8

Wire Gauge

No.	Wire Gauge No.	Dec. Equiv. In.	OA Lgth. In.	Flute Lgth. In.
.....	1	.2280	3 7/8	2 5/8
.....	2	.2210	3 7/8	2 5/8
3DDJC	3	.2130	3 3/4	2 1/2
.....	4	.2090	3 3/4	2 1/2
.....	5	.2055	3 3/4	2 1/2
.....	6	.2040	3 3/4	2 1/2
7DDJC	7	.2010	3 5/8	2 7/16
.....	8	.1990	3 5/8	2 7/16
.....	9	.1960	3 5/8	2 7/16
.....	10	.1935	3 5/8	2 7/16
.....	11	.1910	3 1/2	2 5/16
.....	12	.1890	3 1/2	2 5/16
.....	13	.1850	3 1/2	2 5/16
.....	14	.1820	3 3/8	2 5/16
.....	15	.1800	3 3/8	2 5/16
.....	16	.1770	3 3/8	2 5/16
.....	17	.1730	3 3/8	2 5/16
.....	18	.1695	3 1/4	2 1/8

No.	Wire Gauge No.	Dec. Equiv. In.	OA Lgth. In.	Flute Lgth. In.
.....	19	.1660	3 1/4	2 1/8
20DDJC	20	.1610	3 1/4	2 1/8
21DDJC	21	.1590	3 1/4	2 1/8
.....	22	.1570	3 1/8	2
.....	23	.1540	3 1/8	2
.....	24	.1520	3 1/8	2
.....	25	.1495	3	1 7/8
.....	26	.1470	3	1 7/8
.....	27	.1440	3	1 7/8
.....	28	.1405	2 7/8 x 1 3/4	.....
29DDJC	29	.1360	2 7/8	1 3/4
.....	30	.1285	2 3/4	1 5/8
31DDJC	31	.1200	2 3/4	1 5/8
.....	32	.1160	2 3/4	1 5/8
.....	33	.1130	2 5/8	1 1/2
.....	34	.1110	2 5/8	1 1/2
.....	35	.1100	2 5/8	1 1/2
36DDJC	36	.1065	2 1/2 x 1 7/16	.....
.....	37	.1040	2 1/2	1 7/16
.....	38	.1015	2 1/2	1 7/16
.....	39	.0995	2 3/8	1 3/8
.....	40	.0980	2 3/8	1 3/8
.....	41	.0960	2 3/8	1 3/8
.....	42	.0935	2 1/4	1 1/4
.....	43	.0890	2 1/4	1 1/4
.....	44	.0860	2 1/8	1 1/8
.....	45	.0820	2 1/8	1 1/8
.....	46	.0810	2 1/8	1 1/8
.....	47	.0785	2	1
.....	48	.0760	2	1
.....	49	.0730	2	1
.....	50	.0700	2	1
.....	51	.0670	2	1
.....	52	.0635	1 7/8	7/8
.....	53	.0595	1 7/8	7/8
.....	54	.0550	1 7/8	7/8
55DDJC	55	.0520	1 7/8	7/8
.....	56	.0465	1 3/4	3/4
.....	57	.0430	1 3/4	3/4
.....	58	.0420	1 5/8	1 1/16
.....	59	.0410	1 5/8	1 1/16
.....	60	.0400	1 5/8	1 1/16

Sets

No.	Contents	Desc.
D-13	1/16"-1/4" by 64ths	13-Pc. Set
D-15	1/16"-1/2" by 32nds	15-Pc. Set
D-21	1/16"-3/8" by 64ths	21-Pc. Set
D-26	A-Z	26-Pc. Set
D-29	1/16"-1/2" by 64ths	29-Pc. Set
D-60	1-60	60-Pc. Set
D-115	1/16"-1/2" by 64ths, A-Z, 1-60	115-Pc. Set

VIKING DRILL & TOOL  
Jobbers Length Drills  
Type 240-UB



Super premium hi-molybdenum tool steel. 135° split point for fast penetration, accurate starting without center punch. Precision ground point, flutes, body, clearance and drill diameter. Body and clearance gold surface treated for maximum lubricity. Heat treated at 2185°F, the nitro-carburize finished at 950°F to be measurably harder than high speed steel or cobalt steel. Withstand substantially higher drilling temperatures while maintaining sharpness. For use in work hardening grades of stainless steel, other metal drilling applications.

Inch Sizes

No.	Dia. In.	Dec. Equiv. In.	OA Lgth. In.	Flute Lgth. In.	Pkg. Qty.
6RDJU	1/16	.0625	1 7/8	7/8	12
7RDJU	5/64	.0781	2	1	12
9RDJU	3/32	.0938	2 1/4	1 1/4	12
10RDJU	7/64	.1094	2 5/8	1 1/2	12
12RDJU	1/8	.1200	2 3/4	1 5/8	12
14RDJU	9/64	.1406	2 7/8	1 3/4	12
15RDJU	5/32	.1562	3 1/8	2	12
17RDJU	11/64	.1719	3 1/4	2 1/8	12
18RDJU	3/16	.1875	3 1/2	2 5/16	12
20RDJU	13/64	.2031	3 5/8	2 7/16	12
21RDJU	7/32	.2188	3 3/4	2 1/2	12
23RDJU	15/64	.2344	3 7/8	2 5/8	12
25RDJU	1/4	.2500	4	2 3/4	12
26RDJU	17/64	.2656	4 1/8	2 7/8	12
28RDJU	9/32	.2812	4 1/4	2 9/16	12
29RDJU	19/64	.2969	4 3/8	3 1/16	6
31RDJU	5/16	.3125	4 1/2	3 3/16	6
32RDJU	21/64	.3281	4 5/8	3 5/16	6
34RDJU	11/32	.3438	4 3/4	3 7/16	6
35RDJU	23/64	.3594	4 7/8	3 1/2	6
37RDJU	3/8	.3750	5	3 5/8	6
39RDJU	25/64	.3906	5 1/8	3 3/4	6
40RDJU	13/32	.4062	5 1/4	3 7/8	6
42RDJU	27/64	.4219	5 3/8	3 15/16	6
43RDJU	7/16	.4375	5 1/2	4 1/16	6
45RDJU	29/64	.4531	5 5/8	4 3/16	6
46RDJU	15/32	.4688	5 3/4	4 5/16	6
48RDJU	31/64	.4844	5 7/8	4 3/8	6
50RDJU	1/2	.5000	6	4 1/2	6
.....	33/64	.....	6 5/8	4 13/16	6
.....	17/32	.....	6 5/8	4 13/16	6
.....	35/64	.....	6 5/8	4 13/16	6
.....	9/16	.....	6 5/8	4 13/16	6
.....	37/64	.....	6 5/8	4 13/16	6
.....	19/32	.....	7 1/8	5 3/16	6
.....	39/64	.....	7 1/8	5 3/16	6
.....	5/8	.....	7 1/8	5 3/16	6
.....	41/64	.....	7 1/8	5 3/16	6
.....	21/32	.....	7 1/8	5 3/16	6
.....	43/64	.....	7 3/8	5 5/8	6
.....	11/16	.....	7 3/8	5 5/8	6
.....	45/64	.....	7 3/8	5 5/8	6
.....	23/32	.....	7 3/8	5 5/8	6
.....	47/64	.....	7 3/8	5 5/8	6
.....	3/4	.....	7 3/8	5 5/8	6

Letter Sizes

No.	Letter	Dec. Equiv. In.	OA Lgth. In.	Flute Lgth. In.	Pkg. Qty.
1ZDJU	A	.234	3 7/8	2 5/8	12
2ZDJU	B	.238	4	2 3/4	12
3ZDJU	C	.242	4	2 3/4	12
4ZDJU	D	.246	4	2 3/4	12
5ZDJU	E	.250	4	2 3/4	12
6ZDJU	F	.257	4 1/8	2 7/8	12
7ZDJU	G	.261	4 1/8	2 7/8	12
8ZDJU	H	.266	4 1/8	2 7/8	12
9ZDJU	I	.272	4 1/8	2 7/8	12
10ZDJU	J	.277	4 1/8	2 7/8	12
11ZDJU	K	.281	4 1/4	2 9/16	12
12ZDJU	L	.290	4 1/4	2 9/16	12
13ZDJU	M	.295	4 3/8	3 1/16	6
14ZDJU	N	.302	4 3/8	3 1/16	6
15ZDJU	O	.316	4 1/2	3 3/16	6
16ZDJU	P	.323	4 5/8	3 5/16	6
17ZDJU	Q	.332	4 3/4	3 7/16	6
18ZDJU	R	.339	4 3/4	3 7/16	6
19ZDJU	S	.348	4 7/8	3 1/2	6
20ZDJU	T	.358	4 7/8	3 1/2	6
21ZDJU	U	.368	5	3 5/8	6
22ZDJU	V	.377	5	3 5/8	6
23ZDJU	W	.386	5 1/8	3 3/4	6
24ZDJU	X	.397	5 1/8	3 3/4	6
25ZDJU	Y	.404	5 1/4	3 3/8	6
26ZDJU	Z	.413	5 1/4	3 3/8	6

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Wire Gauge Sizes

No.	Wire Gauge No.	Dec. Equiv. In.	OA Lgth. In.	Flute Lgth. In.	Pkg. Qty.
1DDJU	1	.2280	3/8	2 5/8	12
2DDJU	2	.2210	3/8	2 5/8	12
3DDJU	3	.2130	3/4	2 1/2	12
4DDJU	4	.2090	3/4	2 1/2	12
5DDJU	5	.2055	3/4	2 1/2	12
6DDJU	6	.2040	3/4	2 1/2	12
7DDJU	7	.2010	3/8	2 1/16	12
8DDJU	8	.1990	3/8	2 1/16	12
9DDJU	9	.1960	3/8	2 1/16	12
10DDJU	10	.1935	3/8	2 1/16	12
11DDJU	11	.1910	3/2	2 5/16	12
12DDJU	12	.1890	3/2	2 5/16	12
13DDJU	13	.1850	3/2	2 5/16	12
14DDJU	14	.1820	3/8	2 3/16	12
15DDJU	15	.1800	3/8	2 3/16	12
16DDJU	16	.1770	3/8	2 3/16	12
17DDJU	17	.1730	3/8	2 3/16	12
18DDJU	18	.1695	3/4	2 1/8	12
19DDJU	19	.1660	3/4	2 1/8	12
20DDJU	20	.1610	3/4	2 1/8	12
21DDJU	21	.1590	3/4	2 1/8	12
22DDJU	22	.1570	3/8	2	12
23DDJU	23	.1540	3/8	2	12
24DDJU	4	.1520	3/8	2	12
25DDJU	25	.1495	3	1 7/8	12
26DDJU	26	.1470	3	1 7/8	12
27DDJU	27	.1440	3	1 7/8	12
28DDJU	28	.1405	2 7/8	1 3/4	12
29DDJU	29	.1360	2 7/8	1 3/4	12
30DDJU	30	.1285	2 3/4	1 5/8	12
31DDJU	31	.1200	2 3/4	1 5/8	...
32DDJU	32	.1160	2 3/4	1 5/8	...
33DDJU	33	.1130	2 5/8	1 1/2	...
34DDJU	34	.1110	2 5/8	1 1/2	...
35DDJU	35	.1100	2 5/8	1 1/2	...
36DDJU	36	.1065	2 1/2	1 1/16	...
37DDJU	38	.1040	2 1/2	1 1/16	...
38DDJU	38	.1015	2 1/2	1 1/16	...
39DDJU	39	.0995	2 3/8	1 3/8	...
40DDJU	40	.0980	2 3/8	1 3/8	...
41DDJU	41	.0960	2 3/8	1 3/8	...
42DDJU	42	.0935	2 1/4	1 1/4	...
43DDJU	43	.0890	2 1/4	1 1/4	...
44DDJU	44	.0860	2 1/8	1 1/8	...
45DDJU	45	.0820	2 1/8	1 1/8	...
46DDJU	46	.0810	2 1/8	1 1/8	...
47DDJU	47	.0785	2	1	...
48DDJU	48	.0760	2	1	...
49DDJU	49	.0730	2	1	...
50DDJU	50	.0700	2	1	...
51DDJU	51	.0670	2	1	...
52DDJU	52	.0635	1 7/8	7/8	...
53DDJU	53	.0595	1 7/8	7/8	...
54DDJU	54	.0550	1 7/8	7/8	...
55DDJU	55	.0520	1 7/8	7/8	...
56DDJU	56	.0465	1 3/4	3/4	...
57DDJU	57	.0430	1 3/4	3/4	...
58DDJU	58	.0420	1 5/8	1 1/16	...
59DDJU	59	.0410	1 5/8	1 1/16	...
60DDJU	60	.0400	1 5/8	1 1/16	...

VIKING DRILL & TOOL

Jobbers Length Drills  
Type 240-AN

TiN coated. Heavy duty. 135° split point. Super hard surface. High lubricity. Use on hard metals, work hardening stainless steel and other difficult metals.

No.	Dia. In.	OA Lgth. In.	Flute Lgth. In.	Pkg. Qty.
6RDJT	1/16	1 7/8	7/8	12
7RDJT	5/64	2	1	12
9RDJT	3/32	2 1/4	1 1/4	12
10RDJT	7/64	2 5/8	1 1/2	12
12RDJT	1/8	2 3/4	1 5/8	12

No.	Dia. In.	OA Lgth. In.	Flute Lgth. In.	Pkg. Qty.
14RDJT	9/64	2 7/8	1 3/4	12
15RDJT	5/32	3 1/8	2	12
17RDJT	1 1/64	3 1/4	2 1/8	12
18RDJT	3/16	3 1/2	2 5/16	12
20RDJT	1 3/64	3 5/8	2 7/16	12
21RDJT	7/32	3 3/4	2 1/2	12
23RDJT	1 5/64	3 7/8	2 5/8	12
25RDJT	1/4	4	2 3/4	12
26RDJT	1 7/64	4 1/8	2 7/8	12
28RDJT	9/32	4 1/4	2 15/16	12
29RDJT	1 9/64	4 3/8	3 1/16	6
31RDJT	5/16	4 1/2	3 3/16	6
32RDJT	2 1/64	4 5/8	3 3/16	6
34RDJT	1 1/32	4 3/4	3 7/16	6
35RDJT	2 3/64	4 7/8	3 1/2	6
37RDJT	3/8	5	3 3/8	6
39RDJT	2 5/64	5 1/8	3 3/4	6
40RDJT	1 3/32	5 1/4	3 7/8	6
42RDJT	2 7/64	5 3/8	3 15/16	6
43RDJT	7/16	5 1/2	4 1/16	6
45RDJT	2 9/64	5 5/8	4 3/16	6
46RDJT	1 5/32	5 3/4	4 5/16	6
48RDJT	3 1/64	5 7/8	4 3/8	6
50RDJT	1/2	6	4 1/2	6

Note: Standard package quantity for 240-AN drills is 1/2 the amount shown in the table.

VIKING DRILL & TOOL  
Drill Sets



10-Piece Sets. Include sizes 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4".

11-Piece Sets. Include sizes 1/16" through 3/8" by 32nds or 1.0 mm through 6.0 mm by .5 mm.

13-Piece Sets. Include sizes 1/16" through 1/4" by 64ths.

15-Piece Sets. Include sizes 1/16" through 1/2" by 32nds.

20-Piece Sets. Include sizes 61 through 80.

21-Piece Sets. Include sizes 1/16" through 3/8" by 64ths.

26-Piece Sets. Include sizes A through Z.

29-Piece Sets. Include sizes 1/16" through 1/2" by 64ths.

60-Piece Sets. Include sizes 1 through 60.

115-Piece Sets. Include sizes 1/16" through 1/2" by 64ths, A through Z, 1 through 60.

No.	Set No.	Desc.
240-UB Drill Sets - Ultra-Cut		
.....	SP-13	13-Pc. Set
.....	SP-15	15-Pc. Set
.....	SP-21	21-Pc. Set
.....	SP-26	26-Pc. Set
.....	SP-29	29-Pc. Set
.....	SP-60	60-Pc. Set
.....	SP-115	115-Pc. Set
.....	TRI-1SP	13-Pc. Set
.....	RSP-29	29-Pc. Set

No.	Set No.	Desc.
240-AL Drill Sets - Left Hand Spiral		
.....	LF-8	...

No.	Set No.	Desc.
250-UB Drill Sets - Ultra-Cut		
.....	SPM-13	13-Pc. Set
/592SPM15	SPM-15	15-Pc. Set
.....	SPM-21	21-Pc. Set
.....	SPM-29	29-Pc. Set

No.	Set No.	Desc.
250/258-UB Drill Sets		
.....	RSPM-15	15-Pc. Set
.....	SPM-21R	21 Pc. Set
.....	RSPM-29	29-Pc. Set

No.	Set No.	Desc.
260-UB Drill Sets - Ultra-Cut		
.....	SPT-29	29-Pc. Set
.....	SPT-60	60-Pc. Set

No.	Set No.	Desc.
240-D Drill Sets - Cobalt		
.....	D-13	13-Pc. Set
/592D15	D-15	15-Pc. Set
/592D21	D-21	21-Pc. Set
.....	D-26	26-Pc. Set
/592D29	D-29	29-Pc. Set
.....	D-60	60-Pc. Set
/592D115	D-115	115-Pc. Set

No.	Set No.	Desc.
240-AN Drill Sets - TiN Coated		
.....	AN-13	13-Pc. Set
.....	AN-15	15-Pc. Set
.....	AN-29	29-Pc. Set
.....	AN-60	60-Pc. Set
.....	AN-115	115-Pc. Set

No.	Set No.	Desc.
260-T Drill Sets - Stub Length		
.....	T-10	10-Pc. Set
.....	T-11	11-Pc. Set
.....	T-13	13-Pc. Set
/592T21	T-21	21-Pc. Set
/592T29	T-29	29-Pc. Set
.....	T-60	60-Pc. Set

No.	Set No.	Desc.
240-A Drill Sets - Heavy Duty		
.....	A-10	10-Pc. Set
.....	A-11	11-Pc. Set
.....	A-13	13-Pc. Set
.....	A-15	15-Pc. Set
/592A21	A-21	21-Pc. Set
/592A26	A-26	26-Pc. Set
/592A29	A-29	29-Pc. Set
/592A60	A-60	60-Pc. Set
/592A115	A-115	115-Pc. Set

No.	Set No.	Desc.
240 Drill Sets - Black G.P.		
.....	B-10	10-Pc. Set
.....	B-11	11-Pc. Set
.....	B-13	13-Pc. Set
.....	B-15	15-Pc. Set
.....	B-20	20-Pc. Set
.....	B-21	21-Pc. Set
.....	B-26	26-Pc. Set
/592B29	B-29	29-Pc. Set
.....	B-60	60-Pc. Set
.....	B-115	115-Pc. Set

No.	Set No.	Desc.
240-B Drill Sets - Bright G.P.		
.....	J-10	10-Pc. Set
.....	J-11	11-Pc. Set
.....	J-13	13-Pc. Set

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No.	Set No.	Desc.
/592J15	J-15	15-Pc. Set
/592J20	J-20	20-Pc. Set
/592J21	J-21	21-Pc. Set
/592J26	J-26	26-Pc. Set
/592J29	J-29	29-Pc. Set
/592J60	J-60	60-Pc. Set
/592J115	J-115	115-Pc. Set
.....	TRI-1	13-Pc. Set

**VIKING DRILL & TOOL**

**Drill Sets**

**Type 280 - HSS**

For portable air and electric equipment with 1/2" chuck. May be used in power applications requiring short rigid drill. Silver and deming. 118° point HSS. Contain (8) 6" length bits, sizes 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1".

No.	Model No.	Desc.
..43200	S&D-8	8 Pc. Set

**VIKING DRILL & TOOL**

**Drill Bits**

**Screw Machine Length - Type 260**



High speed steel. General purpose. 118° point. Rigid drill with greater drilling accuracy because shorter drill and flute. For screw machine operation where Type 240-B drill too long. Facilitates chip removal in tough, hard materials. May use in portable drilling equipment.

No.	Dia. In.	Dec. Equiv. In.	OA Lgth. In.	Flute Lgth. In.	Pkg. Qty.
4RDST	3/64	.0469	1 3/8	1/2	12
6RDST	1/16	.0625	1 5/8	5/8	12
7RDST	5/64	.0781	1 11/16	1 1/16	12
9RDST	3/32	.0938	1 3/4	3/4	12
10RDST	7/64	.1094	1 13/16	13/16	12
12RDST	1/8	.1250	1 7/8	7/8	12
14RDST	9/64	.1406	1 15/16	15/16	12
15RDST	5/32	.1562	2 1/16	1	12
17RDST	11/64	.1719	2 1/8	1 1/16	12
18RDST	3/16	.1875	2 3/16	1 1/8	12
20RDST	13/64	.2031	2 1/4	1 3/16	12
21RDST	7/32	.2188	2 5/8	1 1/4	12
23RDST	15/64	.2344	2 7/16	1 5/16	12
25RDST	1/4	.2500	2 1/2	1 3/8	12
26RDST	17/64	.2656	2 5/8	1 7/16	12
28RDST	9/32	.2812	2 11/16	1 1/2	12
29RDST	19/64	.2969	2 3/4	1 9/16	6
31RDST	5/16	.3125	2 13/16	1 5/8	6
32RDST	21/64	.3281	2 15/16	1 11/16	6
34RDST	11/32	.3438	3	1 11/16	6
35RDST	23/64	.3594	3 1/16	1 3/4	6
37RDST	3/8	.3750	3 1/8	1 3/4	6
39RDST	25/64	.3906	3 1/4	1 7/8	6
40RDST	13/32	.4062	3 5/16	1 15/16	6
42RDST	27/64	.4219	3 3/8	2	6
43RDST	7/16	.4375	3 3/16	2 1/16	6
45RDST	29/64	.4531	3 9/16	2 1/8	6
46RDST	15/32	.4688	3 5/8	2 1/8	6
48RDST	31/64	.4844	3 11/16	2 3/16	6
50RDST	1/2	.5000	3 3/4	2 1/4	6

**VIKING DRILL & TOOL**

**Drill Bits**

**Reduced Shank - Type 275 - 1/4"**



High speed steel. General purpose. Bright finish with surface treated flutes. 118° point. For portable air and electric drilling equipment with 1/4" chucks.

No.	Dia. In.	OA Lgth. In.	Flute Lgth. In.	Pkg. Qty.
26DRZ	17/64	3 1/2	1 7/8	12
28DRZ	9/32	3 19/32	1 31/32	12
29DRZ	19/64	3 23/32	2 1/16	6
31DRZ	5/16	3 27/32	2 3/16	6
32DRZ	21/64	3 15/16	2 9/32	6
34DRZ	11/32	4 1/32	2 11/32	6
35DRZ	23/64	4 5/32	2 15/32	6
37DRZ	3/8	4 1/4	2 9/16	6
39DRZ	25/64	4 11/32	2 5/8	6
40DRZ	13/32	4 15/32	2 9/4	6
42DRZ	27/64	4 9/16	2 27/32	6
43DRZ	7/16	4 11/16	2 15/16	6
45DRZ	29/64	4 25/32	3 1/32	6
46DRZ	15/32	4 7/8	3 1/8	6
48DRZ	31/64	5	3 3/32	6
50DRZ	1/2	5	3 3/32	6

**VIKING DRILL & TOOL**

**Drills**

**Type 278 - Jobbers Length**



3/8" shank. General purpose bright flute. 118° point H.S.S. drill for use in portable air or electric drilling equipment with 3/8" chucks. Surface treated flutes on sizes larger than 1/2" diameter. 6/envelope or individual plastic tubes (over 1/2").

No.	Dia. In.	OA Lgth. In.	Flute Lgth. In.
39DRX	25/64	5 1/8	3 3/4
40DRX	13/32	5 1/4	3 7/8
42DRX	27/64	5 5/8	3 15/16
43DRX	7/16	5 1/2	4 1/16
45DRX	29/64	5 5/8	4 3/16
46DRX	15/32	5 3/4	4 5/16
48DRX	31/64	5 7/8	4 3/8
50DRX	1/2	6	4 1/2
53DRX	17/32	6	3
55DRX	9/16	6	3
59DRX	19/32	6	3
62DRX	5/8	6	3

**VIKING DRILL & TOOL**

**Silver & Deming Drills**

**Type 280 - HSS**



Surface treated flutes. 6" OA length with 1/2" shank, silver and deming. General purpose with 118° point. Recommended for use in portable electric drills and power applications such as screw machines where short, rigid drill is required. Individually packaged.

**Drills**

No.	Dia. In.	Dec. Equiv. In.
51DRS	33/64	.5156
53DRS	17/32	.5312
54DRS	35/64	.5469
56DRS	9/16	.5625
57DRS	37/64	.5781
59DRS	19/32	.5938
60DRS	39/64	.6094
62DRS	5/8	.6250
64DRS	41/64	.6406
65DRS	21/32	.6562
67DRS	43/64	.6719
68DRS	11/16	.6875
70DRS	45/64	.7031
71DRS	23/32	.7188
73DRS	47/64	.7344
75DRS	3/4	.7500
76DRS	49/64	.7656
78DRS	25/32	.7812
79DRS	51/64	.7969
81DRS	13/16	.8125
82DRS	53/64	.8281
84DRS	27/32	.8438
85DRS	55/64	.8594
87DRS	7/8	.8750
89DRS	57/64	.8906
90DRS	29/32	.9062
92DRS	59/64	.9219
93DRS	15/16	.9375
95DRS	61/64	.9531
96DRS	31/32	.9688
98DRS	63/64	.9844
100DRS	1	1.0000
106DRS	1 1/16	1.0625
112DRS	1 1/8	1.1250
115DRS	1 1/32	1.1562
118DRS	1 3/16	1.1875
125DRS	1 1/4	1.2500

**Sets**

No.	Desc.
S&D-8	8-Pc. Set

**VIKING DRILL & TOOL**

**Drill Bits**

**Taper Shank - Type 500**



High speed steel. Surface treated. Smaller shank. Packaged individually.

No.	Dia. In.	Dec. Equiv. In.	Taper Shank	OA Lgth. In.	Flute Lgth. In.
48RDTs	31/64	.4844	1	7 3/4	4 3/8
50RDTs	1/2	.5000	1	7 3/4	4 3/8
51RDTs	33/64	.5156	1	8	4 3/8
53RDTs	17/32	.5312	1	8	4 3/8
54RDTs	35/64	.5469	1	8 1/4	4 7/8
56RDTs	9/16	.5625	1	8 1/4	4 7/8
79RDTs	51/64	.7969	2	10	6 1/8
81RDTs	13/16	.8125	2	10	6 1/8
82RDTs	53/64	.8281	2	10	6 1/8
84RDTs	27/32	.8438	2	10	6 1/8
85RDTs	55/64	.8594	2	10	6 1/8
87RDTs	7/8	.8750	2	10	6 1/8
89RDTs	57/64	.8906	2	10	6 1/8
90RDTs	29/32	.9062	2	10	6 1/8
.....	19/64	1.0781	3	11 1/2	6 7/8
.....	13/32	1.0938	3	11 1/2	6 7/8
.....	17/64	1.1094	3	11 3/4	7 1/8
112RDTs	1 1/8	1.1250	3	11 3/4	7 1/8
.....	19/64	1.1406	3	11 7/8	7 1/4
.....	19/32	1.1562	3	11 7/8	7 1/4
.....	1 1/16	1.1719	3	12	7 3/8
.....	13/16	1.1875	3	12	7 3/8

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No.	Dia. In.	Dec. Equiv. In.	Taper Shank	OA Lgth. In.	Flute Lgth. In.
.....	1 1/32	1.2031	3	12 1/8	7 1/2
.....	1/32	1.2188	3	12 1/8	7 1/2
.....	1 15/64	1.2344	3	12 1/2	7 7/8
<b>125RDTS</b>	1 1/4	1.2500	3	12 1/2	7 7/8
.....	1 17/32	1.5312	4	15	9 3/8
.....	1 9/16	1.5625	4	15 1/4	9 5/8
.....	1 19/32	1.5938	4	15 1/2	9 5/8
<b>162RDTS</b>	1 5/8	1.6250	4	15 5/8	10
.....	1 21/32	1.6562	4	15 3/4	10 1/8
.....	1 1 1/16	1.6875	4	15 3/4	10 1/8
.....	1 23/32	1.7188	4	15 3/4	10 1/8
<b>175RDTS</b>	1 3/4	1.7500	4	16 1/4	10 3/8
.....	1 25/32	1.7812	4	16 1/4	10 3/8
.....	1 13/16	1.8125	4	16 1/4	10 3/8
.....	1 27/32	1.8438	4	16 1/4	10 3/8
.....	1 7/8	1.8750	4	16 1/2	10 1/2
.....	1 29/32	1.9062	4	16 1/2	10 1/2
.....	1 15/16	1.9375	4	16 5/8	10 5/8
.....	1 31/32	1.9688	4	16 5/8	10 5/8
<b>200RDTS</b>	2	2.0000	4	16 5/8	10 5/8

**VIKING DRILL & TOOL**  
Drill Bits  
Taper Shank - Type 510



High speed steel. Regular shank. Dia<sup>®</sup> surface treated flutes. Fit tapered holders. Packaged individually.

No.	Dia. In.	Dec. Equiv. In.	Taper Shank	OA Lgth. In.	Flute Lgth. In.
<b>12RDTR</b>	1/8	.1250	1	5 7/8	1 7/8
<b>14RDTR</b>	9/64	.1406	1	5 3/8	2 1/8
<b>15RDTR</b>	5/32	.1562	1	5 3/8	2 1/8
<b>17RDTR</b>	1 1/64	.1719	1	5 3/4	2 1/2
<b>18RDTR</b>	3/16	.1875	1	5 3/4	2 1/2
<b>20RDTR</b>	1 3/64	.2031	1	6	2 3/4
<b>21RDTR</b>	7/32	.2188	1	6	2 3/4
<b>23RDTR</b>	1 5/64	.2344	1	6 1/8	2 7/8
<b>25RDTR</b>	1/4	.2500	1	6 1/8	2 7/8
<b>26RDTR</b>	1 7/64	.2656	1	6 1/4	3
<b>28RDTR</b>	9/32	.2812	1	6 1/4	3
<b>29RDTR</b>	1 9/64	.2969	1	6 3/8	3 1/8
<b>31RDTR</b>	5/16	.3125	1	6 3/8	3 1/8
<b>32RDTR</b>	2 1/64	.3281	1	6 1/2	3 1/4
<b>34RDTR</b>	1 11/32	.3438	1	6 1/2	3 1/4
<b>35RDTR</b>	2 3/64	.3594	1	6 3/4	3 1/2
<b>37RDTR</b>	3/8	.3750	1	6 3/4	3 1/2
<b>39RDTR</b>	2 5/64	.3906	1	7	3 5/8
<b>40RDTR</b>	1 13/32	.4062	1	7	3 5/8
<b>42RDTR</b>	2 7/64	.4219	1	7 1/4	3 7/8
<b>43RDTR</b>	7/16	.4375	1	7 1/4	3 7/8
<b>45RDTR</b>	2 9/64	.4531	1	7 1/2	4 1/8
<b>46RDTR</b>	1 15/32	.4688	1	7 1/2	4 1/8
<b>48RDTR</b>	3 1/64	.4844	2	8 1/4	4 3/8
<b>50RDTR</b>	1/2	.5000	2	8 1/4	4 3/8
<b>51RDTR</b>	3 3/64	.5156	2	8 1/2	4 3/8
<b>53RDTR</b>	1 17/32	.5312	2	8 1/2	4 3/8
<b>54RDTR</b>	3 5/64	.5469	2	8 3/4	4 7/8
<b>56RDTR</b>	9/16	.5625	2	8 3/4	4 7/8
<b>57RDTR</b>	3 7/64	.5781	2	8 3/4	4 7/8
<b>59RDTR</b>	1 19/32	.5938	2	8 3/4	4 7/8
<b>60RDTR</b>	3 9/64	.6094	2	8 3/4	4 7/8
<b>62RDTR</b>	5/8	.6250	2	8 3/4	4 7/8
<b>64RDTR</b>	4 1/64	.6406	2	9	5 1/8
<b>65RDTR</b>	2 1/32	.6562	2	9	5 1/8
<b>67RDTR</b>	4 3/64	.6719	2	9 1/4	5 5/8
<b>68RDTR</b>	1 11/16	.6875	2	9 1/4	5 5/8
<b>70RDTR</b>	4 5/64	.7031	2	9 1/2	5 5/8
<b>71RDTR</b>	2 3/32	.7188	2	9 1/2	5 5/8
<b>73RDTR</b>	4 7/64	.7344	2	9 3/4	5 5/8

No.	Dia. In.	Dec. Equiv. In.	Taper Shank	OA Lgth. In.	Flute Lgth. In.
<b>75RDTR</b>	3/4	.7500	2	9 3/4	5 7/8
<b>76RDTR</b>	4 9/64	.7656	2	9 7/8	6
<b>78RDTR</b>	2 29/32	.7812	2	9 7/8	6
<b>79RDTR</b>	5 1/64	.7969	3	10 3/4	6 1/8
<b>81RDTR</b>	1 13/16	.8125	3	10 3/4	6 1/8
<b>82RDTR</b>	5 59/64	.8281	3	10 3/4	6 1/8
<b>84RDTR</b>	2 27/32	.8438	3	10 3/4	6 1/8
<b>85RDTR</b>	5 57/64	.8594	3	10 3/4	6 1/8
<b>87RDTR</b>	7/8	.8750	3	10 3/4	6 1/8
<b>89RDTR</b>	5 57/64	.8906	3	10 3/4	6 1/8
<b>90RDTR</b>	2 29/32	.9062	3	10 3/4	6 1/8
<b>92RDTR</b>	5 59/64	.9219	3	10 3/4	6 1/8
<b>93RDTR</b>	1 19/16	.9375	3	10 3/4	6 1/8
<b>95RDTR</b>	6 61/64	.9531	3	11	6 3/8
<b>96RDTR</b>	3 31/32	.9688	3	11	6 3/8
<b>98RDTR</b>	6 63/64	.9844	3	11	6 3/8
<b>100RDTR</b>	1	1.0000	3	11	6 3/8
<b>101RDTR</b>	1 1/64	1.0156	3	11 1/8	6 1/2
<b>103RDTR</b>	1 1/32	1.0312	3	11 1/8	6 1/2
<b>104RDTR</b>	1 3/64	1.0469	3	11 1/4	6 5/8
<b>106RDTR</b>	1 1/16	1.0625	3	11 1/4	6 5/8
<b>107RDTR</b>	1 5/64	1.0781	4	12 1/2	6 7/8
<b>109RDTR</b>	1 9/32	1.0938	4	12 1/2	6 7/8
<b>110RDTR</b>	1 7/64	1.1094	4	12 3/4	7 1/8
<b>112RDTR</b>	1 1/8	1.1250	4	12 3/4	7 1/8
<b>114RDTR</b>	1 9/64	1.1406	4	12 7/8	7 1/4
<b>115RDTR</b>	1 9/32	1.1562	4	12 7/8	7 1/4
<b>117RDTR</b>	1 11/64	1.1719	4	13	7 3/8
<b>118RDTR</b>	1 13/16	1.1875	4	13	7 3/8
<b>120RDTR</b>	1 13/64	1.2031	4	13 1/8	7 1/2
<b>121RDTR</b>	1 17/32	1.2188	4	13 1/8	7 1/2
<b>123RDTR</b>	1 15/64	1.2344	4	13 1/2	7 7/8
<b>125RDTR</b>	1 1/4	1.2500	4	13 1/2	7 7/8
<b>126RDTR</b>	1 17/64	1.2656	4	14 1/8	8 1/2
<b>128RDTR</b>	1 9/32	1.2812	4	14 1/8	8 1/2
<b>129RDTR</b>	1 19/64	1.2969	4	14 1/4	8 5/8
<b>131RDTR</b>	1 19/16	1.3125	4	14 1/4	8 5/8
<b>132RDTR</b>	2 1/64	1.3281	4	14 3/8	8 3/4
<b>134RDTR</b>	1 11/32	1.3438	4	14 3/8	8 3/4
<b>135RDTR</b>	2 23/64	1.3594	4	14 1/2	8 7/8
<b>137RDTR</b>	1 13/8	1.3750	4	14 1/2	8 7/8
<b>139RDTR</b>	2 25/64	1.3906	4	14 5/8	9
<b>140RDTR</b>	1 13/32	1.4062	4	14 5/8	9
<b>142RDTR</b>	1 27/64	1.4219	4	14 3/4	9 1/8
<b>143RDTR</b>	1 17/16	1.4375	4	14 3/4	9 1/8
<b>145RDTR</b>	2 29/64	1.4531	4	14 7/8	9 1/4
<b>146RDTR</b>	1 19/32	1.4688	4	14 7/8	9 1/4
<b>148RDTR</b>	1 31/64	1.4844	4	15	9 3/8
<b>150RDTR</b>	1 1/2	1.5000	4	15	9 3/8
<b>153RDTR</b>	1 17/32	1.5312	5	16 3/8	9 3/8
<b>156RDTR</b>	1 19/16	1.5625	5	16 3/8	9 3/8
<b>159RDTR</b>	1 19/32	1.5938	5	16 7/8	9 3/8
<b>162RDTR</b>	1 15/8	1.6250	5	17	10
<b>165RDTR</b>	2 12/32	1.6562	5	17 1/8	10 1/8
<b>168RDTR</b>	1 11/16	1.6875	5	17 1/8	10 1/8
<b>171RDTR</b>	2 23/32	1.7188	5	17 1/8	10 1/8
<b>175RDTR</b>	1 3/4	1.7500	5	17 1/8	10 1/8
<b>178RDTR</b>	2 29/32	1.7812	5	17 1/8	10 1/8
<b>181RDTR</b>	1 13/16	1.8125	5	17 1/8	10 1/8
<b>184RDTR</b>	2 27/32	1.8438	5	17 1/8	10 1/8
<b>187RDTR</b>	1 7/8	1.8750	5	17 3/8	10 3/8
<b>190RDTR</b>	2 29/32	1.9062	5	17 3/8	10 3/8
<b>193RDTR</b>	1 15/16	1.9375	5	17 3/8	10 3/8
<b>196RDTR</b>	2 31/32	1.9688	5	17 3/8	10 3/8
<b>200RDTR</b>	2	2.0000	5	17 3/8	10 3/8
.....	2 21/32	2.0312	5	17 3/8	10 3/8
.....	2 1/16	2.0625	5	17 3/8	10 3/8
.....	2 29/32	2.0938	5	17 3/8	10 3/8
.....	2 1/8	2.1250	5	17 3/8	10 3/8
<b>215RDTR</b>	2 25/32	2.1562	5	17 3/8	10 3/8
.....	2 29/16	2.1875	5	17 3/8	10 3/8
.....	2 27/32	2.2188	5	17 3/8	10 3/8
<b>225RDTR</b>	2 1/4	2.2500	5	17 3/8	10 3/8
.....	2 25/16	2.3125	5	17 3/8	10 3/8
<b>237RDTR</b>	2 3/8	2.3750	5	17 3/8	10 3/8
.....	2 27/16	2.4375	5	18 3/4	11 1/4
<b>250RDTR</b>	2 1/2	2.5000	5	18 3/4	11 1/4
.....	2 29/16	2.5625	5	19 1/2	11 7/8
<b>262RDTR</b>	2 5/8	2.6250	5	19 1/2	11 7/8
.....	2 11/16	2.6875	5	20 3/8	12 3/4

No.	Dia. In.	Dec. Equiv. In.	Taper Shank	OA Lgth. In.	Flute Lgth. In.
<b>275RDTR</b>	2 3/4	2.7500	5	20 3/8	12 3/4
.....	2 13/16	2.8125	5	21 1/8	13 3/8
.....	2 7/8	2.8750	5	21 1/8	13 3/8
.....	2 15/16	2.9375	5	21 3/4	14
<b>300RDTR</b>	3	3.0000	5	21 3/4	14

**EXTRA LENGTH DRILLS**  
Taper Shank



No.	Size In.	Dec. Equiv. In.	Morse Taper No.	Flute Lgth. In.	OA Lgth. In.
List No. 118					
<b>50RDTR</b>	1/2	.5000	2	14	18
<b>62RDTR</b>	5/8	.6250	2	14	18
<b>75RDTR</b>	3/4	.7500	2	14	18
<b>87RDTR</b>	7/8	.8750	3	13	18
<b>100RDTR</b>	1	1.0000	3	13	18

**VIKING DRILL & TOOL**  
Extra Length Drills  
Longboys - HSS



General purpose. 118° point. For production drilling. Individually packaged.

**Type 200.** 12" long. Brite Flute<sup>®</sup> through 1/2" diameter. All other sizes have surface treated flutes.

**Type 208.** 18" long. Surface treated flutes.

No.	Dia. In.	Dec. Equiv. In.	Flute Lgth. In.
Type 200 - 12" OA Lgth.			
<b>12RD12</b>	1/8	.1250	9
<b>14RD12</b>	9/64	.1406	9
<b>15RD12</b>	5/32	.1562	9
<b>17RD12</b>	1 1/64	.1719	9
<b>18RD12</b>	3/16	.1875	9
<b>20RD12</b>	1 3/64	.2031	9
<b>21RD12</b>	7/32	.2188	9
<b>23RD12</b>	1 5/64	.2344	9
<b>25RD12</b>	1/4	.2500	9
<b>26RD12</b>	1 7/64	.2656	9
<b>28RD12</b>	9/32	.2812	9
<b>29RD12</b>	1 9/64	.2969	9
<b>31RD12</b>	5/16	.3125	9
<b>32RD12</b>	2 1/64	.3281	9
<b>34RD12</b>	1 11/32	.3438	9
<b>35RD12</b>	2 3/64	.3594	9
<b>37RD12</b>	3/8	.3750	9
<b>39RD12</b>	2 5/64	.3906	9
<b>40RD12</b>	1 13/32	.4062	9
<b>42RD12</b>	2 7/64	.4219	9
<b>43RD12</b>	7/16	.4375	9
<b>45RD12</b>	2 9/64	.4531	9
<b>46RD12</b>	1 15/32	.4688	9
<b>48RD12</b>	3 1/64	.4844	9
<b>50RD12</b>	1/2	.5000	9
<b>53RD12</b>	1 17/32	.5312	9
<b>56RD12&lt;/</b>			

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No.	Dia. In.	Dec. Equiv. In.	Flute Lgth. In.
59RD12	19/32	.5938	9
62RD12	5/8	.6250	9
68RD12	11/16	.6975	9
75RD12	3/4	.7500	9

**Type 208 - 18" OA Lgth.**

18RD18	3/16	.1875	10
.....	7/32	.2188	10
25RD18	1/4	.2500	12
.....	9/32	.2812	12
31RD18	5/16	.3125	12
.....	11/32	.3438	12
37RD18	3/8	.3750	12
.....	13/32	.4062	12
43RD18	7/16	.4375	12
.....	15/32	.4688	12
50RD18	1/2	.5000	12
.....	17/32	.5312	12
.....	9/16	.5625	12
.....	19/32	.5938	12
.....	5/8	.6250	12

**DRILL DISPENSERS**

Empty



Inventory system. Steel cabinet and drawers. Epoxy finish. One-piece drawer slide. Permanent identification strips. Stackable. 14 5/8" L x 7 3/8" W x 7 3/4" H.

No.	Model No.	For Drill Sizes	Wt. Lbs.
...13000	1	1/16" - 1/2" (x64ths)	10 1/4
...13025	2	#1 - #60 Wire Ga.	13 1/4
...13050	3	A - Z Letter Size	10 1/4

**INDEXED DRILL CONTAINERS**

Empty



Drill stand and indexed container with tap information and decimal equivalents. Made of steel. For tool and die makers, machinists, electricians, cabinet makers, garage mechanics, manual training schools, vocational schools, aviators and anyone who uses small drills. Indexes do not include drills.

No.	Model No.	Size	Wdth. In.	Dpth. In.	Ht. In.
<b>Fractional</b>					
/35010350	15	1/16" - 1/2" x 32nds	4	7	1 1/4
/35010550	29	1/16" - 1/2" x 64ths	4	7	1 3/4

No.	Model No.	Size	Wdth. In.	Dpth. In.	Ht. In.
<b>Letter</b>					
/35010500	26	A-Z	4	7	1 3/4
<b>Wire Gauge</b>					
/35010600	60	1-60	3 1/4	4 1/2	1

**COMBINED DRILLS & COUNTERSINKS HSS**



Surface treated flutes. 118° point.

**Plain Type 296.** Equal diameter drill ends. 60° included angle.

**Bell Type 297.** 60° and 120° included angles. Diameter at intersection of these two angles is bell diameter. Small 120° angular chamfer protects edges of center hole.

**Plain Type 296**

No.	Size	Body Dia. In.	Dia./Lgth. Drills In.	OA Lgth. In.
/59200	00	1/8	.025 x .030	1 7/32
/5920	1	1/8	1/32 x .038	1 7/32
/592001	1	1/8	3/64 x 3/64	1 1/4
/592002	2	3/16	5/64 x 5/64	1 7/8
/592003	3	1/4	7/64 x 7/64	2
/592004	4	5/16	1/8 x 1/8	2 1/8
/592005	5	7/16	3/16 x 3/16	2 3/4
/592006	6	1/2	7/32 x 7/32	3
/592007	7	5/8	1/4 x 1/4	3 1/4
/592008	8	3/4	5/16 x 5/16	3 1/2

**Bell Type 297**

No.	Size	Body Dia. In.	Dia./Lgth. Drills In.	Bell Dia. In.	OA Lgth. In.
/592011	11	1/8	3/64 x 3/64	.100	1 1/4
/592012	12	3/16	1/16 x 1/16	.150	1 7/8
/592013	13	1/4	3/32 x 3/32	.200	2
/592014	14	5/16	7/64 x 7/64	.250	2 1/8
/592015	15	7/16	5/32 x 5/32	.350	2 3/4
/592016	16	1/2	3/16 x 3/16	.400	3
/592017	17	5/8	7/32 x 7/32	.500	3 1/4
/592018	18	3/4	1/4 x 1/4	.600	3 1/2

**COMBINATION CENTER DRILLS & COUNTERSINKS**

Long Series - HSS



Produce holes in components or workpieces requiring extra length for hard to reach areas. Countersink angle 60°. 12/pkg.

No.	Size	Body Dia. In.	Point Dia. In.	Point Lgth. In.	OA Lgth. In.
<b>High Speed Steel</b>					
/59221030	#1 x 3	1/8	3/64	3/64	3
/59221040	#1 x 4	1/8	3/64	3/64	4

No.	Size	Body Dia. In.	Point Dia. In.	Point Lgth. In.	OA Lgth. In.
/59221050	#1 x 5	1/8	3/64	3/64	5
/59221060	#1 x 6	1/8	3/64	3/64	6
/59222030	#2 x 3	3/16	5/64	5/64	3
/59222040	#2 x 4	3/16	5/64	5/64	4
/59222050	#2 x 5	3/16	5/64	5/64	5
/59222060	#2 x 6	3/16	5/64	5/64	6
/59223030	#3 x 3	1/4	7/64	7/64	3
.....	#3 x 4	1/4	7/64	7/64	4
.....	#3 x 5	1/4	7/64	7/64	5
/59223060	#3 x 6	1/4	7/64	7/64	6
.....	#4 x 3	5/16	1/8	1/8	3
/59224040	#4 x 4	5/16	1/8	1/8	4
/59224060	#4 x 6	5/16	1/8	1/8	6
.....	#4 1/2 x 4	3/8	9/64	9/64	4
.....	#4 1/2 x 5	3/8	9/64	9/64	5
/59224560	#4 1/2 x 6	3/8	9/64	9/64	6
.....	#5 x 4	7/16	3/16	3/16	4
.....	#5 x 5	7/16	3/16	3/16	5
/59225060	#5 x 6	7/16	3/16	3/16	6
/59226040	#6 x 4	1/2	7/32	7/32	4
.....	#6 x 5	1/2	7/32	7/32	5
/59226060	#6 x 6	1/2	7/32	7/32	6
.....	#7 x 6	5/8	1/4	1/4	6
.....	#8 x 6	3/4	5/16	5/16	6

**KEO CUTTERS**

Combined Center Drills & Countersinks

Plain Type - HSSC & HSS - Right Hand



For producing center holes in components or workpieces requiring machining between centers. Titanium-nitride coating and 5-Pc. sets also available. Angle 60°.

No.	Size	Cut	Body Dia. In.	Point Dia. In.*	OA Lgth. In.
<b>Aircraft - High Speed Steel</b>					
/59210010	5-0	RH	1/8	.010	1 1/4
/59210015	4-0	RH	1/8	.015	1 1/4
/59210020	3-0	RH	1/8	.020	1 1/4
/59210032	0	RH	1/8	1/32	1 1/4

**Plain Type - High Speed Steel**

/59210100	1	RH	1/8	3/64	1 1/4
/59210200	2	RH	3/16	5/64	1 7/8
/59210300	3	RH	1/4	7/64	2
/59210400	4	RH	5/16	1/8	2 1/8
.....	4 1/2	RH	3/8	9/64	2 1/2
/59210500	5	RH	7/16	3/16	2 3/4
/59210600	6	RH	1/2	7/32	3
/59210700	7	RH	5/8	1/4	3 1/4
/59210800	8	RH	3/4	5/16	3 1/2
/59210900	9	RH	7/8	11/32	3 5/8
/59211000	10	RH	3/8	3/8	3 3/4

\*Point diameter and point length are the same.

**KEO CUTTERS**

Combined Center Drills & Countersinks

Bell Type - HSS & HSSC - Right Hand



For producing protected center holes in components or workpieces requiring machining between centers. 60° countersink angle. 120° chamfer eliminates risk of deforming countersink seat. Titanium-nitride coating also available.

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No.	Size	Body Dia. In.	Point Dia. In.	OA Lgth. In.	Bell Dia. In.
<b>High Speed Steel</b>					
/59211100	11 RH	1/8	3/64	1 1/4	.100
/59211200	12 RH	3/16	1/16	1 7/8	.150
/59211300	13 RH	1/4	3/32	2	.200
/59211400	14 RH	5/16	7/64	2 1/8	.250
/59211500	15 RH	7/16	5/32	2 3/4	.350
/59211600	16 RH	1/2	3/16	3	.400
/59211700	17 RH	5/8	7/32	3 1/4	.500
/59211800	18 RH	3/4	1/4	3 1/2	.600
.....	19 RH	7/8	5/16	3 5/8	.700
.....	20 LH	1	3/8	3 3/4	.800

Note: Point diameter and point length are the same.

**COMBINATION CENTER DRILLS & COUNTERSINKS**  
Long Series - HSS



Produce holes in components or workpieces requiring extra length for hard to reach areas. Countersink angle 60°. 12/pkg.

No.	Size	Body Dia. In.	Point Dia. In.	Point Lgth. In.	OA Lgth. In.
<b>High Speed Steel</b>					
/59221030	#1x3	1/8	3/64	3/64	3
/59221040	#1x4	1/8	3/64	3/64	4
/59221050	#1x5	1/8	3/64	3/64	5
/59221060	#1x6	1/8	3/64	3/64	6
/59222030	#2x3	3/16	5/64	5/64	3
/59222040	#2x4	3/16	5/64	5/64	4
/59222050	#2x5	3/16	5/64	5/64	5
/59222060	#2x6	3/16	5/64	5/64	6
/59223030	#3x3	1/4	7/64	7/64	3
.....	#3x4	1/4	7/64	7/64	4
.....	#3x5	1/4	7/64	7/64	5
/59223060	#3x6	1/4	7/64	7/64	6
.....	#4x3	5/16	1/8	1/8	3
/59224040	#4x4	5/16	1/8	1/8	4
/59224060	#4x6	5/16	1/8	1/8	6
.....	#4 1/2 x 4	3/8	9/64	9/64	4
.....	#4 1/2 x 5	3/8	9/64	9/64	5
/59224560	#4 1/2 x 6	3/8	9/64	9/64	6
.....	#5x4	7/16	3/16	3/16	4
.....	#5x5	7/16	3/16	3/16	5
/59225060	#5x6	7/16	3/16	3/16	6
/59226040	#6x4	1/2	7/32	7/32	4
.....	#6x5	1/2	7/32	7/32	5
/59226060	#6x6	1/2	7/32	7/32	6
.....	#7x6	5/8	1/4	1/4	6
.....	#8x6	3/4	5/16	5/16	6

**KEO CUTTERS**  
Single Flute Countersinks



Large positive rake and single flute provide smooth surface finish on variety of materials. For chamfering, deburring and countersinking. Also available in 5-Pc. sets.

No.	Body Dia. In.	Shank Dia. In.	Point Angle Deg.	Shank Lgth. In.	OA Lgth. In.
.....	1/8	1/8	60	...	1 1/4
.....	1/8	1/8	82	...	1 1/4
.....	1/8	1/8	90	...	1 1/4
.....	3/16	3/16	60	...	1 3/8
18RC81	3/16	3/16	82	...	1 3/8

No.	Body Dia. In.	Shank Dia. In.	Point Angle Deg.	Shank Lgth. In.	OA Lgth. In.
.....	3/16	3/16	90	...	1 3/8
.....	1/4	1/4	60	...	1 1/2
25RC81	1/4	1/4	82	...	1 1/2
.....	1/4	1/4	90	...	1 1/2
.....	3/8	1/4	60	7/8	1 3/4
37RC81	3/8	1/4	82	7/8	1 3/4
.....	3/8	1/4	90	7/8	1 3/4
.....	1/2	1/4	60	1	2
50RC81	1/2	1/4	82	1	2
.....	1/2	1/4	90	1	2
.....	3/4	1/2	60	1 1/4	2 5/8
75RC81	3/4	1/2	82	1 1/4	2 5/8
75RC91	3/4	1/2	90	1 1/4	2 5/8
.....	1	1/2	60	1 1/4	2 3/4
100RC81	1	1/2	82	1 1/4	2 3/4
.....	1	1/2	90	1 1/4	2 3/4
.....	1 1/4	1/2	60	1 1/4	3
125RC81	1 1/4	1/2	82	1 1/4	2 3/4
.....	1 1/4	1/2	90	1 1/4	2 3/4
.....	1 1/2	3/4	60	1 1/4	3 1/4
150RC81	1 1/2	3/4	82	1 1/4	2 7/8
.....	1 1/2	3/4	90	1 1/4	2 7/8
.....	1 3/4	3/4	60	1 1/4	3 1/2
.....	1 3/4	3/4	82	1 1/4	3
.....	1 3/4	3/4	90	1 1/4	3
.....	1 3/4	3/4	100	1 1/4	3
.....	1 3/4	3/4	110	1 1/4	3
.....	1 3/4	3/4	120	1 1/4	3
.....	2	3/4	60	1 1/4	3 3/4
200RC81	2	3/4	82	1 1/4	3 1/4
.....	2	3/4	90	1 1/4	3 1/4

**KEO CUTTERS**  
Center Reamers  
3-Flute



Designed for countersinking holes for centers or for enlarging existing holes.

No.	Body Dia. In.	Shank Dia. In.	Point Angle Deg.	Shank Lgth. In.	OA Lgth. In.
25RC63	1/4	1/4	60	.....	1 1/2
25RC83	1/4	1/4	82	.....	1 1/2
25RC93	1/4	1/4	90	.....	1 1/2
37RC63	3/8	1/4	60	7/8	1 3/4
37RC83	3/8	1/4	82	7/8	1 3/4
37RC93	3/8	1/4	90	7/8	1 3/4
50RC63	1/2	1/4	60	1	2
50RC83	1/2	1/4	82	1	2
50RC93	1/2	1/4	90	1	2
62RC63	5/8	3/8	60	1	2 1/4
62RC83	5/8	3/8	82	1	2 1/4
62RC93	5/8	3/8	90	1	2 1/4
75RC63	3/4	1/2	60	1 1/4	2 5/8
75RC83	3/4	1/2	82	1 1/4	2 5/8
.....	3/4	1/2	90	1 1/4	2 5/8
100RC63	1	1/2	60	1 1/4	2 3/4
100RC83	1	1/2	82	1 1/4	2 3/4
100RC93	1	1/2	90	1 1/4	2 3/4
.....	1 1/4	1/2	60	1 1/4	3
.....	1 1/4	1/2	82	1 1/4	2 3/4
.....	1 1/4	1/2	90	1 1/4	2 3/4
.....	1 1/2	3/4	60	1 1/4	3 1/4
.....	1 1/2	3/4	82	1 1/4	2 7/8
.....	1 1/2	3/4	90	1 1/4	2 7/8
.....	1 3/4	3/4	60	1 1/4	3 1/2
.....	1 3/4	3/4	82	1 1/4	3
.....	1 3/4	3/4	90	1 1/4	3
.....	2	3/4	60	1 1/4	3 3/4
.....	2	3/4	82	1 1/4	3 1/4
.....	2	3/4	90	1 1/4	3 1/4

**KEO CUTTERS**  
Machine Countersinks  
4-Flute - Straight Shank



Shank dia. 1/2". Shank length 2 1/4".

No.	Body Dia. In.	Point Angle Deg.	OA Lgth. In.
.....	1/2	60	3 7/8
50RC84	1/2	82	3 7/8
.....	1/2	90	3 7/8
.....	5/8	60	4
62RC84	5/8	82	4
.....	5/8	90	4
.....	3/4	60	4 1/8
75RC84	3/4	82	4 1/8
.....	3/4	90	4 1/8
.....	7/8	60	4 1/4
87RC84	7/8	82	4 1/4
.....	7/8	90	4 1/4
.....	1	60	4 3/8
100RC84	1	82	4 3/8
.....	1	90	4 3/8

**KEO CUTTERS**  
Center Reamers  
4-Flute



Shank length 1 1/4".

No.	Body Dia. In.	Shank Dia. In.	Point Angle Deg.	OA Lgth. In.
.....	1 1/4	1/2	60	3
125RC84	1 1/4	1/2	82	2 3/4
.....	1 1/4	1/2	90	2 3/4
.....	1 1/2	3/4	60	3 1/4
150RC84	1 1/2	3/4	82	2 7/8
.....	1 1/2	3/4	90	2 7/8
.....	1 3/4	3/4	60	3 1/2
.....	1 3/4	3/4	82	3
.....	1 3/4	3/4	90	3
.....	2	3/4	60	3 3/4
200RC84	2	3/4	82	3 1/4
.....	2	3/4	90	3 1/4

**MAGNA®**  
Spade Bits  
Contractor Series



Precision-ground spur and cutting edges. Hole allows for pulling wires back through ceilings, walls, and floors. Applications include removing wood chips from deep holes. Vinyl pouch packaging. Shank dia.: 1/4". Length: 6".

No.	Body Dia. In.
/60952005	1/4
/60952015	5/16
/60952025	3/8
/60952035	7/16
/60952045	1/2
/60952055	5/16
/60952065	5/8

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No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.
/Y02297	C2SLE-1603	1/4	3/8	1 1/4	3 3/8
/Y02301	C2SLE-2003	5/16	3/8	1 3/8	3 3/8
/Y02305	C2SLE-2403	3/8	3/8	1 1/2	3 3/4
/Y02321	C2SLE-3204	1/2	1/2	2	4
/Y02337	C2SLE-4005	5/8	5/8	2	4 1/8
/Y02359	C2SLE-4806	3/4	3/4	2 1/4	4 1/2
/Y02394	C2SLE-5607	7/8	7/8	2 1/2	4 3/4
/Y02426	C2SLE-6408	1	1	3	5 1/2
/Y02435	C2SLE-B0808	1 1/8	1	3	5 1/2
/Y02443	C2SLE-B1608	1 1/4	1	3	5 1/2
/Y02445	C2SLE-B1610	1 1/4	1 1/4	3	5 1/2
/Y02461	C2SLE-B3210	1 1/2	1 1/4	3	5 1/2
/Y02469	C2SLE-B4810	1 3/4	1 1/4	3	5 1/2
/Y02477	C2SLE-B6410	2	1 1/4	3	5 1/2
/Y02482	C2SLE-B6416	2	2	3	6 3/4

**Y.G-1 TOOL CO.**

**Weldon Shanked End Mills**

2-Flute - Extended Length - 8% Cobalt Steel (M42)



Helical flutes. Weldon shank. For highly accurate deep step machining. Tolerances: Mill diameter +.0010/-.0000; shank diameter +.0015/-.0000. TiN and TiCN coated available.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.
/Y03289	C2SLS-0803	1/8	3/8	3/8	1 3/16
/Y03293	C2SLS-1203	3/16	3/8	1/2	1 1/8
/Y03297	C2SLS-1603	1/4	3/8	5/8	1 1/2
/Y03301	C2SLS-2003	5/16	3/8	3/4	1 3/4
/Y03305	C2SLS-2403	3/8	3/8	3/4	1 3/4
/Y03321	C2SLS-3204	1/2	1/2	1	2 1/2
/Y03337	C2SLS-4005	5/8	5/8	1 3/8	2 23/32
/Y03359	C2SLS-4806	3/4	3/4	1 5/8	3 11/32
/Y03394	C2SLS-5607	7/8	7/8	2	4
/Y03426	C2SLS-6408	1	1	2 1/2	4 31/32
/Y03445	C2SLS-B1610	1 1/4	1 1/4	3	4 31/32

**Y.G-1 TOOL CO.**

**Center Cutting Spiral End Mills**

2-Flute - Regular Length - 8% Cobalt Steel (M42)



Helical flutes. Weldon shank. For slotting, keying and milling. Tolerances: Mill diameter +.0010/-.0000; shank diameter +.0015/-.0000. TiN and TiCN coated available.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.
/Y11289	C2DRS-0803	1/8	3/8	3/8	3 1/16
/Y11290	C2DRS-0903	9/64	3/8	7/16	3 3/8
/Y11291	C2DRS-1003	5/32	3/8	7/16	3 3/8
/Y11292	C2DRS-1103	1 1/64	3/8	7/16	3 3/8
/Y11293	C2DRS-1203	3/16	3/8	7/16	3 3/8
/Y11294	C2DRS-1303	1 3/64	3/8	1/2	3 3/8
/Y11295	C2DRS-1403	7/32	3/8	1/2	3 3/8
/Y11296	C2DRS-1503	1 5/64	3/8	1/2	3 3/8
/Y11297	C2DRS-1603	1/4	3/8	1/2	3 3/8
/Y11298	C2DRS-1703	1 7/64	3/8	9/16	3 3/8
/Y11299	C2DRS-1803	9/32	3/8	9/16	3 3/8
/Y11300	C2DRS-1903	1 9/64	3/8	9/16	3 3/8
/Y11301	C2DRS-2003	5/16	3/8	9/16	3 3/8
/Y11302	C2DRS-2103	2 1/64	3/8	9/16	3 3/8
/Y11303	C2DRS-2203	1 1/32	3/8	9/16	3 3/8

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.
/Y11304	C2DRS-2303	2 3/64	3/8	9/16	3 3/8
/Y11305	C2DRS-2403	3/8	3/8	9/16	3 3/8
/Y11307	C2DRS-2504	2 5/64	1/2	1 3/16	3 3/4
/Y11309	C2DRS-2604	1 3/32	1/2	1 3/16	3 3/4
/Y11311	C2DRS-2704	2 7/64	1/2	1 3/16	3 3/4
/Y11313	C2DRS-2804	7/16	1/2	1 3/16	3 3/4
/Y11315	C2DRS-2904	2 9/64	1/2	1 3/16	3 3/4
/Y11317	C2DRS-3004	1 5/32	1/2	1 3/16	3 3/4
/Y11319	C2DRS-3104	3 1/64	1/2	1 3/16	3 3/4
/Y11321	C2DRS-3204	1/2	1/2	1 3/16	3 3/4
/Y11326	C2DRS-3405	1 7/32	5/8	1 1/8	4 1/2
/Y11330	C2DRS-3605	9/16	5/8	1 1/8	4 1/2
/Y11334	C2DRS-3805	1 9/32	5/8	1 1/8	4 1/2
/Y11337	C2DRS-4005	5/8	5/8	1 1/8	4 1/2
/Y11344	C2DRS-4206	2 1/32	3/4	1 5/16	5
/Y11350	C2DRS-4406	1 1/16	3/4	1 5/16	5
/Y11354	C2DRS-4606	2 3/32	3/4	1 5/16	5
/Y11359	C2DRS-4806	3/4	3/4	1 5/16	5
/Y11368	C2DRS-5007	2 5/32	7/8	1 9/16	5 1/2
/Y11377	C2DRS-5207	1 3/16	7/8	1 9/16	5 1/2
/Y11384	C2DRS-5407	2 7/32	7/8	1 9/16	5 1/2
/Y11394	C2DRS-5607	7/8	7/8	1 9/16	5 1/2
/Y11402	C2DRS-5808	2 9/32	1	1 5/8	5 7/8
/Y11410	C2DRS-6008	1 5/16	1	1 5/8	5 7/8
/Y11417	C2DRS-6208	3 1/32	1	1 5/8	5 7/8
/Y11426	C2DRS-6408	1	1	1 5/8	5 7/8

**Y.G-1 TOOL CO.**

**Ball End End Mills**

Single End - 2-Flute - Regular Length - 8% Cobalt Steel (M42)



Helical flutes. Weldon shank. Mill bottom slot radii, fillets and special contours. Create slotting cut.

Good chip removal capacity. Tolerances: Mill diameter +.0010/-.0000; shank diameter +.0015/-.0000. TiN and TiCN coated available.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.
/Y41289	C2SRB-0803	1/8	3/8	3/8	2 5/16
/Y41293	C2SRB-1203	3/16	3/8	1/2	2 9/8
/Y41297	C2SRB-1603	1/4	3/8	5/8	2 7/16
/Y41301	C2SRB-2003	5/16	3/8	3/4	2 1/2
/Y41305	C2SRB-2403	3/8	3/8	3/4	2 1/2
/Y41313	C2SRB-2804	7/16	1/2	1	3
/Y41321	C2SRB-3204	1/2	1/2	1	3
/Y41328	C2SRB-3604	9/16	1/2	1 1/8	3 1/8
/Y41336	C2SRB-4004	5/8	1/2	1 1/8	3 1/8
/Y41337	C2SRB-4005	5/8	5/8	1 3/8	3 1/2
/Y41357	C2SRB-4804	3/4	1/2	1 5/16	3 5/16
/Y41359	C2SRB-4806	3/4	3/4	1 5/8	3 7/8
/Y41391	C2SRB-5606	7/8	3/4	2	4 1/4
/Y41394	C2SRB-5607	7/8	7/8	2	4 1/4
/Y41422	C2SRB-6406	1	3/4	2 1/4	4 1/2
/Y41426	C2SRB-6408	1	1	2 1/4	4 3/4
/Y41431	C2SRB-B0806	1 1/8	3/4	1 5/8	3 7/8
/Y41435	C2SRB-B0808	1 1/8	1	2 1/4	4 3/4
/Y41439	C2SRB-B1606	1 1/4	3/4	1 5/8	3 7/8
/Y41445	C2SRB-B1610	1 1/4	1 1/4	2 1/2	5
/Y41449	C2SRB-B2406	1 3/8	3/4	1 5/8	4 1/8
/Y41453	C2SRB-B2410	1 3/8	1 1/4	2 1/2	5
/Y41457	C2SRB-B3206	1 1/2	3/4	1 5/8	4 1/8
/Y41461	C2SRB-B3210	1 1/2	1 1/4	2 1/2	5
.....	C2SRB-B6410	2	1 1/4	2 1/2	5

**Y.G-1 TOOL CO.**

**Weldon Shank Ball End End Mills**  
Single End - 2-Flute - Extended Length - 8% Cobalt Steel (M42)



Helical flutes. Weldon shank. For highly efficient copying and die mold corner radii deep cutting applications. Tolerances: Mill diameter +.0010/-.0000; shank diameter +.0015/-.0000. TiN and TiCN coated available.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.
/Y42289	C2SLB-0803	1/8	3/8	3/8	2 3/8
/Y42293	C2SLB-1203	3/16	3/8	1/2	2 1 1/16
/Y42297	C2SLB-1603	1/4	3/8	5/8	3 1/16
/Y42301	C2SLB-2003	5/16	3/8	3/4	3 5/16
/Y42305	C2SLB-2403	3/8	3/8	3/4	3 5/16
/Y42313	C2SLB-2804	7/16	1/2	1	3 1 1/16
/Y42321	C2SLB-3204	1/2	1/2	1	4
/Y42337	C2SLB-4005	5/8	5/8	1 3/8	4 5/8
/Y42359	C2SLB-4806	3/4	3/4	1 5/8	5 3/8
/Y42426	C2SLB-6408	1	1	2 1/2	7 1/4

**Y.G-1 TOOL CO.**

**Ball End End Mills**

Double End - 2-Flute - Regular Length - 8% Cobalt Steel (M42)



Helical flutes. Weldon shank. Increase material removal. Machine ground notch for positive tool holder anchoring. Tolerances: Mill diameter +.0000/-.0010; shank diameter -.0002/-.0015. TiN and TiCN coated available.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.
/Y45289	C2DRB-0803	1/8	3/8	3/8	3 1/16
/Y45293	C2DRB-1203	3/16	3/8	7/16	3 3/8
/Y45297	C2DRB-1603	1/4	3/8	1/2	3 3/8
/Y45301	C2DRB-2003	5/16	3/8	9/16	3 3/8
/Y45305	C2DRB-2403	3/8	3/8	9/16	3 3/8
/Y45313	C2DRB-2804	7/16	1/2	1 3/16	3 3/4
/Y45321	C2DRB-3204	1/2	1/2	1 3/16	3 3/4
/Y45337	C2DRB-4005	5/8	5/8	1 1/8	4 1/2
/Y45359	C2DRB-4806	3/4	3/4	1 5/8	5
/Y45426	C2DRB-6408	1	1	1 5/8	5 7/8

**We welcome the opportunity to quote on any special tools which you may require.**

**Y.G-1 TOOL CO.**

**High Speed Cutting End Mills**

4-Flute - Regular Length - 8% Cobalt Steel (M42)



Helical flutes. Weldon shank. For high speed cutting and high efficiency machining. Can regrind. Mill diameter tolerances +.0010, -.0000. Shank diameter tolerance +.0015, -.0000. TiN and TiCN coated available.

**8% Cobalt Steel (M42)**

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.
.....	C4SRS-0803	1/8	3/8	3/8	2 15/16
.....	C4SRS-0903	9/64	3/8	7/16	2 3/8
.....	C4SRS-1003	5/32	3/8	7/16	2 3/8
.....	C4SRS-1103	11/64	3/8	1/2	2 3/8
.....	C4SRS-1203	3/16	3/8	1/2	2 3/8
.....	C4SRS-1303	13/64	3/8	9/16	2 7/16
.....	C4SRS-1403	7/32	3/8	9/16	2 7/16
.....	C4SRS-1503	15/64	3/8	5/8	2 7/16
.....	C4SRS-1603	1/4	3/8	5/8	2 7/16
.....	C4SRS-1703	17/64	3/8	11/16	2 1/2
.....	C4SRS-1803	9/32	3/8	11/16	2 1/2
.....	C4SRS-1903	19/64	3/8	3/4	2 1/2
.....	C4SRS-2003	5/16	3/8	3/4	2 1/2
.....	C4SRS-2103	21/64	3/8	3/4	2 1/2
.....	C4SRS-2203	11/32	3/8	3/4	2 1/2
.....	C4SRS-2303	23/64	3/8	3/4	2 1/2
.....	C4SRS-2403	3/8	3/8	3/4	2 1/2
.....	C4SRS-2503	25/64	3/8	1	2 11/16
.....	C4SRS-2603	13/32	3/8	1	2 11/16
.....	C4SRS-2703	27/64	3/8	1	2 11/16
.....	C4SRS-2803	7/16	3/8	1	2 11/16
.....	C4SRS-2904	29/64	1/2	1 1/4	3 1/4
.....	C4SRS-3004	15/32	1/2	1 1/4	3 1/4
.....	C4SRS-3104	31/64	1/2	1 1/4	3 1/4
.....	C4SRS-3203	1/2	3/8	1	2 11/16
.....	C4SRS-3204	1/2	1/2	1 1/4	3 1/4
.....	C4SRS-3404	17/32	1/2	1 3/8	3 3/8
.....	C4SRS-3604	9/16	1/2	1 3/8	3 3/8
.....	C4SRS-3804	19/32	1/2	1 3/8	3 3/8
.....	C4SRS-4004	5/8	1/2	1 3/8	3 3/8

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.
.....	C4SRS-4005	5/8	5/8	1 5/8	3 3/4
.....	C4SRS-4204	21/32	1/2	1 5/8	3 3/8
/Y04348	C4SRS-4405	11/16	5/8	1 5/8	3 3/4
/Y04352	C4SRS-4604	23/32	1/2	1 5/8	3 5/8
/Y04357	C4SRS-4804	3/4	1/2	1 5/8	3 5/8
/Y04358	C4SRS-4805	3/4	5/8	1 5/8	3 3/4
.....	C4SRS-4806	3/4	3/4	1 5/8	3 7/8
.....	C4SRS-5005	25/32	5/8	1 7/8	4
.....	C4SRS-5206	13/16	3/4	1 7/8	4 1/8
.....	C4SRS-5405	27/32	5/8	1 7/8	4
/Y04380	C4SRS-5606	7/8	3/4	1 7/8	4 1/8
.....	C4SRS-5607	7/8	7/8	1 7/8	4 1/8
/Y04394	C4SRS-5806	29/32	3/4	1 7/8	4 1/8
/Y04399	C4SRS-6006	15/16	3/4	1 7/8	4 1/8
.....	C4SRS-6206	31/32	3/4	1 7/8	4 1/8
/Y04414	C4SRS-6405	1	5/8	1 7/8	4
/Y04420	C4SRS-6406	1	3/4	1 7/8	4 1/8
.....	C4SRS-6408	1	1	2	4 1/2

**High Speed Steel (M2)**

No.	Model No.	Cutter Dia. In.	Shank Dia. In.	Flute Lgth. In.	OA Lgth. In.
/Y04289	4SRS-0803	1/8	3/8	3/8	2 15/16
/Y04290	4SRS-0903	9/64	3/8	7/16	2 3/8
/Y04291	4SRS-1003	5/32	3/8	7/16	2 3/8
/Y04292	4SRS-1103	11/64	3/8	1/2	2 3/8
/Y04293	4SRS-1203	3/16	3/8	1/2	2 3/8
/Y04294	4SRS-1303	13/64	3/8	9/16	2 7/16
/Y04295	4SRS-1403	7/32	3/8	9/16	2 7/16
/Y04296	4SRS-1503	15/64	3/8	5/8	2 7/16
/Y04297	4SRS-1603	1/4	3/8	5/8	2 7/16
/Y04298	4SRS-1703	17/64	3/8	11/16	2 1/2
/Y04299	4SRS-1803	9/32	3/8	11/16	2 1/2
/Y04300	4SRS-1903	19/64	3/8	3/4	2 1/2
/Y04301	4SRS-2003	5/16	3/8	3/4	2 1/2
/Y04302	4SRS-2103	21/64	3/8	3/4	2 1/2
/Y04303	4SRS-2203	11/32	3/8	3/4	2 1/2
/Y04304	4SRS-2303	23/64	3/8	3/4	2 1/2
/Y04305	4SRS-2403	3/8	3/8	3/4	2 1/2
/Y04306	4SRS-2503	25/64	3/8	1	2 11/16
/Y04308	4SRS-2603	13/32	3/8	1	2 11/16
/Y04310	4SRS-2703	27/64	3/8	1	2 11/16
/Y04312	4SRS-2803	7/16	3/8	1	2 11/16
/Y04315	4SRS-2904	29/64	1/2	1 1/4	3 1/4
/Y04317	4SRS-3004	15/32	1/2	1 1/4	3 1/4
/Y04319	4SRS-3104	31/64	1/2	1 1/4	3 1/4
/Y04320	4SRS-3203	1/2	3/8	1	2 11/16

No.	Model No.	Cutter Dia. In.	Shank Dia. In.	Flute Lgth. In.	OA Lgth. In.
/Y04321	4SRS-3204	1/2	1/2	1 1/4	3 1/4
/Y04324	4SRS-3404	17/32	1/2	1 3/8	3 3/8
/Y04328	4SRS-3604	9/16	1/2	1 3/8	3 3/8
/Y04332	4SRS-3804	19/32	1/2	1 3/8	3 3/8
/Y04336	4SRS-4004	5/8	1/2	1 3/8	3 3/8
/Y04337	4SRS-4005	5/8	5/8	1 3/8	3 3/4
/Y04340	4SRS-4204	21/32	1/2	1 3/8	3 3/8

**Y.G-1 TOOL CO.**

**Single End End Mills**

Cobalt - HSS - Long Length - Multi Flute - R.H.



Helical flutes. Weldon shank. Allows deeper cutting. Can regrind. Weldon shank. Mill diameter tolerance +.0010/-.0000. Shank diameter tolerance +.0015/-.0000. Shank has same dia. as cutting portion. TiN coated or TiCN coated available upon request.

**8% Cobalt**

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.
/Y05297	C4SLS-1603	1/4	3/8	1 1/4	3 1/16
/Y05301	C4SLS-2003	5/16	3/8	1 3/8	3 1/8
/Y05305	C4SLS-2403	3/8	3/8	1 1/2	3 1/4
/Y05313	C4SLS-2804	7/16	1/2	1 3/4	3 3/4
/Y05321	C4SLS-3204	1/2	1/2	2	4
/Y05337	C4SLS-4005	5/8	5/8	2 1/2	4 5/8
/Y05359	C4SLS-4806	3/4	3/4	3	5 1/4
/Y05394	C4SLS-5607	7/8	7/8	3 1/2	5 3/4
/Y05426	C4SLS-6408	1	1	4	6 1/2
/Y05436	C6SLS-B0808	1 1/8	1	4	6 1/2
/Y05444	C6SLS-B1608	1 1/4	1	4	6 1/2
/Y05446	C6SLS-B1610	1 1/4	1 1/4	4	6 1/2
/Y05460	C6SLS-B3208	1 1/2	1	4	6 1/2
/Y05462	C6SLS-B3210	1 1/2	1 1/4	44	6 1/2
/Y05470	C6SLS-B4810	1 3/4	1 1/4	4	6 1/2
/Y05478	C6SLS-B6410	2	1 1/4	4	6 1/2
/Y05485	C6SLS-B6416	2	2	4	7 3/4

**Y.G-1 TOOL CO.**

**Weldon Shank End Mills**

Extra Long Length - Multiple Flute - 8% Cobalt



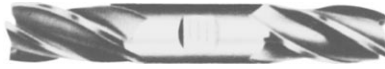
Helical flutes. Weldon shank. For accurate machining of deep step. Can regrind. Mill diameter tolerance +.0010/-.0000. Shank has same dia. as cutting portion. Shank diameter tolerance +.0015/-.0000. TiN coated or TiCN coated available upon request.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	O.A.L. In.	No. Flutes
/Y06297	C4SES-1603	1/4	3/8	3 3/16	3 3/16	4
/Y06301	C4SES-2003	5/16	3/8	2	3 3/4	4
/Y06305	C4SES-2403	3/8	3/8	2 1/2	4 1/4	4
/Y06321	C4SES-3204	1/2	1/2	3	5	4
/Y06337	C4SES-4005	5/8	5/8	4	6 1/8	4
/Y06359	C4SES-4806	3/4	3/4	4	6 1/4	4
/Y06394	C4SES-5607	7/8	7/8	5	7 1/4	4
/Y06426	C4SES-6408	1	1	6	8 1/2	4
/Y06446	C6SES-B1610	1 1/4	1 1/4	6	8 1/2	6
/Y06462	C6SES-B3210	1 1/2	1 1/4	8	10 1/2	6
/Y06491	C6SES-B6416	2	2	8	11 3/4	6

**Y.G-1 TOOL CO.**

**Double End End Mills**

4-Flute - Regular Length - 8% Cobalt



Helical flutes. Weldon shank. For finishing applications. Can regrind. Mill diameter tolerance +.0000/-.0010. Shank diameter tolerance -.0002/-.0015. Shank has same dia. as cutting portion. TiN coated or TiCN coated available upon request.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	O.A.L. In.
/Y12289	C4DRS-0803	1/8	3/8	3/8	3 1/16
/Y12290	C4DRS-0903	9/64	3/8	7/16	3 3/8
/Y12291	C4DRS-1003	5/32	3/8	7/16	3 3/8
/Y12292	C4DRS-1103	11/64	3/8	1/2	3 3/4
/Y12293	C4DRS-1203	3/16	3/8	1/2	3 3/4
/Y12294	C4DRS-1303	13/64	3/8	9/16	3 3/4
/Y12295	C4DRS-1403	7/32	3/8	9/16	3 3/4
/Y12296	C4DRS-1503	15/64	3/8	5/8	3 3/8
/Y12297	C4DRS-1603	1/4	3/8	5/8	3 3/8
/Y12298	C4DRS-1703	17/64	3/8	11/16	3 3/8
/Y12299	C4DRS-1803	9/32	3/8	11/16	3 3/8
/Y12300	C4DRS-1903	19/64	3/8	3/4	3 1/2
/Y12301	C4DRS-2003	5/16	3/8	3/4	3 1/2
/Y12302	C4DRS-2103	21/64	3/8	3/4	3 1/2
/Y12303	C4DRS-2203	11/32	3/8	3/4	3 1/2
/Y12304	C4DRS-2303	23/64	3/8	3/4	3 1/2
/Y12305	C4DRS-2403	3/8	3/8	3/4	3 1/2
/Y12307	C4DRS-2504	25/64	1/2	1	4 1/8
/Y12309	C4DRS-2604	13/32	1/2	1	4 1/8
/Y12311	C4DRS-2704	27/64	1/2	1	4 1/8
/Y12313	C4DRS-2804	7/16	1/2	1	4 1/8
/Y12315	C4DRS-2904	29/64	1/2	1	4 1/8
/Y12317	C4DRS-3004	15/32	1/2	1	4 1/8
/Y12319	C4DRS-3104	31/64	1/2	1	4 1/8
/Y12321	C4DRS-3204	1/2	1/2	1	4 1/8
/Y12330	C4DRS-3605	9/16	5/8	1 3/8	5
/Y12337	C4DRS-4005	5/8	5/8	1 3/8	5
/Y12350	C4DRS-4406	11/16	3/4	1 5/8	5 5/8
/Y12359	C4DRS-4806	3/4	3/4	1 5/8	5 5/8
/Y12377	C4DRS-5207	13/16	7/8	1 7/8	6 1/8
/Y12394	C4DRS-5607	7/8	7/8	1 7/8	6 1/8
/Y12410	C4DRS-6008	15/16	1	1 7/8	6 3/8
/Y12426	C4DRS-6408	1	1	1 7/8	6 3/8

**Y.G-1 TOOL CO.**

**Center Cutting Ball End End Mills**

Single End - HSCO - Regular Length - 4 Flute - R.H.



Helical flutes. Weldon shank. 8% cobalt steel (M42). Mill bottom slot radii, fillets and special contours. Center cutting. Drill at start of slotting cut. Mill diameter tolerance +.0010/-.0000. Shank diameter tolerance +.0015/-.0000. Shank same dia. as cutting portion. TiN coated and TiCN coated available upon request.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	O.A. Lgth. In.
/Y43289	C4SRB-0803	1/8	3/8	3/8	2 7/16
/Y43293	C4SRB-1203	3/16	3/8	1/2	2 3/8
/Y43297	C4SRB-1603	1/4	3/8	5/8	2 7/16
/Y43301	C4SRB-2003	5/16	3/8	3/4	2 1/2
/Y43305	C4SRB-2403	3/8	3/8	3/4	2 1/2
/Y43312	C4SRB-2803	7/16	3/8	1	2 11/16
/Y43321	C4SRB-3204	1/2	1/2	1 1/4	3 1/4
/Y43337	C4SRB-4005	5/8	5/8	1 5/8	3 3/4

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	O.A. Lgth. In.
/Y43350	C4SRB-4405	11/16	5/8	1 5/8	3 3/4
/Y43359	C4SRB-4806	3/4	3/4	1 5/8	3 7/8
/Y43394	C4SRB-5607	7/8	7/8	1 7/8	4 1/8
/Y43426	C4SRB-6408	1	1	2	4 1/2
/Y43435	C4SRB-B0808	1 1/8	1	2	4 1/2
/Y43445	C4SRB-B1610	1 1/4	1 1/4	2	4 1/2
/Y43461	C4SRB-B3210	1 1/2	1 1/4	2	4 1/2
/Y43477	C4SRB-B6410	2	1 1/4	2	4 1/2

**Y.G-1 TOOL CO.**

**Deep Cutting Ball End End Mills**

Single End - HSCO - Long Length - 4 Flute - R.H.



Helical flutes. Weldon shank. 8% cobalt steel (M42). For copying and die mold corner radii deep cutting applications. Mill diameter tolerance +.0010/-.0000. Shank diameter tolerance +.0015/-.0000. Shank same as cutting portion. TiN coated and TiCN coated available upon request.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	O.A. Lgth. In.
/Y44297	C4SLB-1603	1/4	3/8	1 1/4	3 1/16
/Y44301	C4SLB-2003	5/16	3/8	1 3/8	3 3/8
/Y44305	C4SLB-2403	3/8	3/8	1 1/2	3 1/4
/Y44321	C4SLB-3204	1/2	1/2	2	4
/Y44337	C4SLB-4005	5/8	5/8	2 1/2	4 5/8
/Y44359	C4SLB-4806	3/4	3/4	3	5 1/4
/Y44394	C4SLB-5607	7/8	7/8	3 1/2	5 3/4
/Y44426	C4SLB-6408	1	1	4	6 1/2

**Y.G-1 TOOL CO.**

**Weldon Shank Ball End End Mills**

Double End - HSS - Regular Length - 4 Flute - R.H.



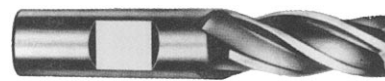
Helical flutes. Machine ground notch for positive anchoring in holder. Mill diameter tolerance +.0000/-.0010. Shank diameter tolerance -.0002/-.0015. Shank same as cutting portion. TiN coated or TiCN coated available upon request.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	O.A. Lgth. In.
.....	C4DRB-0803	1/8	3/8	3/8	3 1/16
.....	C4DRB-1203	3/16	3/8	1/2	3 1/4
.....	C4DRB-1603	1/4	3/8	5/8	3 3/8
.....	C4DRB-2003	5/16	3/8	3/4	3 1/2
.....	C4DRB-2403	3/8	3/8	3/4	3 1/2
.....	C4DRB-2804	7/16	1/2	1	4 1/8
.....	C4DRB-3204	1/2	1/2	1	4 1/8
.....	C4DRB-4005	5/8	5/8	1 3/8	5
.....	C4DRB-4806	3/4	3/4	1 5/8	5 5/8
.....	C4DRB-6408	1	1	1 7/8	6 3/8

**Y.G-1 TOOL CO.**

**High Speed Cutting End Mills**

Single End - HSCO - Regular Length - 4 Flute - R.H.



Helical flutes. Weldon shank. For high speed cutting and high efficiency machining applications. Can regrind. Tolerances:

Mill diameter +.0010/-.0000, shank diameter +.0015/-.0000. TiN and TiCN coated available.

8% Cobalt

No.	Model No.	Cutter Dia. In.	Shank Dia. In.	Flute Lgth. In.	O.A. Lgth. In.
/Y04460	C6SRS-B3208	1 1/2	1	2	4 1/2
/Y04462	C6SRS-B3210	1 1/2	1 1/4	2	4 1/2
/Y04468	C6STS-B4806	1 3/4	3/4	2	4 1/2
/Y04470	C8STS-B4810	1 3/4	1 1/4	2	4 1/2
/Y04476	C8STS-B6406	2	3/4	2	4 1/2
/Y04478	C6SRS-B6410	2	1 1/4	2	4 1/2
/Y04481	C6SRS-B6416	2	2	2	5 3/4

**Y.G-1 TOOL CO.**

**Center Cutting End Mills**

Regular Length - 4-Flute - Center Cutting - 8% Cobalt



Helical flutes. Weldon shank. Create slot beginning. For pocketing, tracer milling, cam milling, die sinking and slotting. Mill diameter tolerance +.0010/-.0000. Shank diameter tolerance +.0015/-.0000. Shank same as cutting portion. TiN coated and TiCN coated available upon request.

8% Cobalt

No.	Model No.	Cutter Dia. In.	Shank Dia. In.	Flute Lgth. In.	O.A. Lgth. In.
.....	C4SRC-0803	1/8	3/8	3/8	2 5/16
.....	C4SRC-1003	5/32	3/8	7/16	2 3/8
.....	C4SRC-1203	3/16	3/8	1/2	2 3/8
.....	C4SRC-1403	7/32	3/8	9/16	2 7/16
.....	C4SRC-1603	1/4	3/8	5/8	2 7/16
.....	C4SRC-1803	9/32	3/8	1 1/16	2 1/2
.....	C4SRC-2003	5/16	3/8	3/4	2 1/2
.....	C4SRC-2203	1 1/32	3/8	3/4	2 1/2
.....	C4SRC-2403	3/8	3/8	3/4	2 1/2
.....	C4SRC-2603	13/32	3/8	1	2 11/16
.....	C4SRC-2803	7/16	3/8	1	2 11/16
.....	C4SRC-3003	15/32	3/8	1	2 11/16
.....	C4SRC-3203	1/2	3/8	1	2 11/16
.....	C4SRC-3204	1/2	1/2	1 1/4	3 1/4
.....	C4SRC-4004	5/8	1/2	1 3/8	3 3/8
.....	C4SRC-4005	5/8	5/8	1 5/8	3 3/4
.....	C4SRC-4405	1 1/16	5/8	1 5/8	3 3/4
.....	C4SRC-4804	3/4	1/2	1 5/8	3 3/8
.....	C4SRC-4805	3/4	5/8	1 5/8	3 3/4
.....	C4SRC-4806	3/4	3/4	1 5/8	3 3/8
.....	C4SRC-5606	7/8	3/4	1 7/8	4 1/8
.....	C4SRC-5607	7/8	7/8	1 7/8	4 1/8
.....	C4SRC-6405	1	5/8	1 7/8	4
.....	C4SRC-6406	1	3/4	1 7/8	4 1/8
.....	C4SRC-6408	1	1	2	4 1/2
.....	C4SRC-B0808	1 1/8	1	2	4 1/2
.....	C4SRC-B1610	1 1/4	1 1/4	2	4 1/2
.....	C4SRC-B3210	1 1/2	1 1/4	2	4 1/2

High Speed Steel

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	O.A. Lgth. In.
/Y07289	4SRC-0803	1/8	3/8	3/8	2 5/16
/Y07291	4SRC-1003	5/32	3/8	7/16	2 3/8
/Y07293	4SRC-1203	3/16	3/8	1/2	2 3/8
/Y07295	4SRC-1403	7/32	3/8	9/16	2 7/16
/Y07297	4SRC-1603	1/4	3/8	5/8	2 7/16
/Y07299	4SRC-1803	9/32	3/8	1 1/16	2 1/2
/Y07301	4SRC-2003	5/16	3/8	3/4	2 1/2
/Y07303	4SRC-2203	1 1/32	3/8	3/4	2 1/2
/Y07305	4SRC-2403	3/8	3/8	3/4	2 1/2
/Y07308	4SRC-2603	13/32	3/8	1	2 11/16
/Y07312	4SRC-2803	7/16	3/8	1	2 11/16

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No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.	No. Flutes
/Y07316	4SRC-3003	1 1/32	3/8	1	2 1/16	6
/Y07320	4SRC-3203	1/2	3/8	1	2 1/16	6
/Y07321	4SRC-3204	1/2	1/2	1 1/4	3 1/4	6
/Y07336	4SRC-4004	5/8	1/2	1 3/8	3 3/8	6
/Y07337	4SRC-4005	5/8	5/8	1 3/8	3 3/4	6
/Y07348	4SRC-4405	1 1/16	5/8	1 3/8	3 3/4	6
/Y07357	4SRC-4804	3/4	1/2	1 3/8	3 3/8	6
/Y07358	4SRC-4805	3/4	5/8	1 3/8	3 3/4	6
/Y07359	4SRC-4806	3/4	3/4	1 3/8	3 3/8	6
/Y07391	4SRC-5606	7/8	3/4	1 7/8	4 1/8	6
/Y07394	4SRC-5607	7/8	7/8	1 7/8	4 1/8	6
/Y07420	4SRC-6405	1	5/8	1 7/8	4	6
/Y07422	4SRC-6406	1	3/4	1 7/8	4 1/8	6
/Y07426	4SRC-6408	1	1	2	4 1/2	6
/Y07435	4SRC-B0808	1 1/8	1	2	4 1/2	6
/Y07445	4SRC-B1610	1 1/4	1 1/4	2	4 1/2	6
/Y07461	4SRC-B3210	1 1/2	1 1/4	2	4 1/2	6

**Y.G-1 TOOL CO.**

**Center Cutting End Mills**

Regular Length - 6-Flute - Center Cutting - 8% Cobalt



Helical flute. Weldon shank. For starting slot, pocketing, tracer milling, cam milling, die sinking and slotting. Mill diameter tolerance +.0010/- .0000. Shank diameter tolerance +.0015/- .0000. Shank same as cutting portion. TiN coated and TiCN coated available as well.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.	No. Flutes
/Y07322	C6SRC-3204	1/2	1/2	1 1/4	3 1/4	6
/Y07338	C6SRC-4005	5/8	5/8	1 3/8	3 3/4	6
/Y07349	C6SRC-4405	1 1/16	5/8	1 3/8	3 3/4	6
/Y07360	C6SRC-4806	3/4	3/4	1 3/8	3 3/8	6
/Y07395	C6SRC-5607	7/8	7/8	1 7/8	4 1/8	6
/Y07427	C6SRC-6408	1	1	2	4 1/2	6
/Y07436	C6SRC-B0808	1 1/8	1	2	4 1/2	6
/Y07446	C6SRC-B1610	1 1/4	1 1/4	2	4 1/2	6
/Y07462	C6SRC-B3210	1 1/2	1 1/4	2	4 1/2	6
/Y07478	C6SRC-B6410	2	1 1/4	2	4 1/2	6
/Y07481	C6SRC-B6416	2	2	2	5 3/4	6

**Y.G-1 TOOL CO.**

**Center Cutting End Mills**

Long Length - Multiple Flute - Center Cutting - 8% Cobalt



Helical flutes. Weldon shank. Allow deeper cutting. Mill diameter tolerance +.0010/- .0000. Shank diameter tolerance +.0015/- .0000. Shank same as cutting portion. TiN coated and TiCN coated available upon request.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.	No. Flutes
/Y08297	C4SLC-1603	1/4	3/8	1 1/4	3 1/16	4
/Y08301	C4SLC-2003	5/16	3/8	1 3/8	3 3/8	4
/Y08305	C4SLC-2403	3/8	3/8	1 1/2	3 1/4	4
/Y08321	C4SLC-3204	1/2	1/2	2	4	4
/Y08337	C4SLC-4005	5/8	5/8	2 1/2	4 5/8	4
/Y08359	C4SLC-4806	3/4	3/4	3	5 1/4	4
/Y08394	C4SLC-5607	7/8	7/8	3 1/2	5 3/4	4
/Y08426	C4SLC-6408	1	1	4	6 1/2	4
/Y08445	C4SLC-B1610	1 1/4	1 1/4	4	6 1/2	4
/Y08461	C4SLC-B3210	1 1/2	1 1/4	4	6 1/2	4

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.	No. Flutes
/Y08322	C6SLC-3204	1/2	1/2	2	4	6
/Y08338	C6SLC-4005	5/8	5/8	2 1/2	4 5/8	6
/Y08360	C6SLC-4806	3/4	3/4	3	5 1/4	6
/Y08395	C6SLC-5607	7/8	7/8	3 1/2	5 3/4	6
/Y08427	C6SLC-6408	1	1	4	6 1/2	6
/Y08446	C6SLC-B1610	1 1/4	1 1/4	4	6 1/2	6
/Y08462	C6SLC-B3210	1 1/2	1 1/4	4	6 1/2	6
/Y08478	C6SLC-B6410	2	1 1/4	4	6 1/2	6
/Y08485	C6SLC-B6416	2	2	4	7 3/4	6
/Y08489	C6SLC-B6401	2	2	6	9 3/4	6

**Y.G-1 TOOL CO.**

**Single End End Mills**

Center Cutting - Multiple Flute - Extra Long Length - 8% Cobalt Steel (M42)



Helical flutes. Weldon shank. For highly accurate deep step machining. Mill dia. tolerance +.0010/- .0000. Shank dia. tolerance +.0015/- .0000. TiN and TiCN coated available.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.	No. Flutes
/Y09297	C4SEC-1603	1/4	3/8	4	1 3/4	3 3/16
/Y09301	C4SEC-2003	5/16	3/8	4	2	3 3/4
/Y09305	C4SEC-2403	3/8	3/8	4	2 1/2	4 1/4
/Y09321	C4SEC-3204	1/2	1/2	4	3	5
/Y09337	C4SEC-4005	5/8	5/8	4	4	6 1/8
/Y09359	C4SEC-4806	3/4	3/4	4	4	6 1/4
/Y09394	C4SEC-5607	7/8	7/8	4	5	7 1/4
/Y09426	C4SEC-6408	1	1	4	6	8 1/2
/Y09445	C4SEC-B1610	1 1/4	1 1/4	4	6	8 1/2
/Y09322	C6SEC-3204	1/2	1/2	6	3	5
/Y09338	C6SEC-4005	5/8	5/8	6	4	6 1/8
/Y09360	C6SEC-4806	3/4	3/4	6	4	6 1/4
/Y09395	C6SEC-5607	7/8	7/8	6	5	7 1/4
/Y09427	C6SEC-6408	1	1	6	6	8 1/2
/Y09446	C6SEC-B1610	1 1/4	1 1/4	6	6	8 1/2
/Y09462	C6SEC-B3210	1 1/2	1 1/4	6	8	10 1/2
/Y09491	C6SEC-B6416	2	2	6	8	11 3/4

**Y.G-1 TOOL CO.**

**Center Cutting End Mills**

Center Cutting - 4-Flute - Regular Length - 8% Cobalt Steel (M42)



Helical flutes. Weldon shank. For slabbing, shallow pocketing, tracer milling, die sinking and similar applications. Mill dia. tolerance +.0000/- .0010. Shank dia. tolerance -.0002/- .0015. TiN and TiCN coated available.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.	No. Flutes
/Y13289	C4DRC-0803	1/8	3/8	3/8	3 1/16	4
/Y13290	C4DRC-0903	9/64	3/8	7/16	3 1/8	4
/Y13291	C4DRC-1003	5/32	3/8	7/16	3 1/8	4
/Y13292	C4DRC-1103	11/64	3/8	1/2	3 1/4	4
/Y13293	C4DRC-1203	3/16	3/8	1/2	3 1/4	4
/Y13294	C4DRC-1303	13/64	3/8	9/16	3 1/4	4
/Y13295	C4DRC-1403	7/32	3/8	9/16	3 1/4	4
/Y13296	C4DRC-1503	15/64	3/8	5/8	3 3/8	4
/Y13297	C4DRC-1603	1/4	3/8	5/8	3 3/8	4
/Y13298	C4DRC-1703	17/64	3/8	11/16	3 3/8	4
/Y13299	C4DRC-1803	9/32	3/8	11/16	3 3/8	4
/Y13300	C4DRC-1903	19/64	3/8	3/4	3 1/2	4

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.	No. Flutes
/Y13301	C4DRC-2003	5/16	3/8	3/4	3 1/2	4
/Y13302	C4DRC-2103	21/64	3/8	3/4	3 1/2	4
/Y13303	C4DRC-2203	11/32	3/8	3/4	3 1/2	4
/Y13304	C4DRC-2303	23/64	3/8	3/4	3 1/2	4
/Y13305	C4DRC-2403	3/8	3/8	3/4	3 1/2	4
/Y13307	C4DRC-2504	25/64	1/2	1	4 1/8	4
/Y13309	C4DRC-2604	13/32	1/2	1	4 1/8	4
/Y13311	C4DRC-2704	27/64	1/2	1	4 1/8	4
/Y13313	C4DRC-2804	7/16	1/2	1	4 1/8	4
/Y13315	C4DRC-2904	29/64	1/2	1	4 1/8	4
/Y13317	C4DRC-3004	15/32	1/2	1	4 1/8	4
/Y13319	C4DRC-3104	31/64	1/2	1	4 1/8	4
/Y13321	C4DRC-3204	1/2	1/2	1	4 1/8	4
/Y13330	C4DRC-3605	9/16	5/8	1 3/8	5	4
/Y13337	C4DRC-4005	5/8	5/8	1 3/8	5	4
/Y13350	C4DRC-4406	11/16	3/4	1 3/8	5 5/8	4
/Y13359	C4DRC-4806	3/4	3/4	1 3/8	5 5/8	4
/Y13377	C4DRC-5207	13/16	7/8	1 7/8	6 1/8	4
/Y13394	C4DRC-5607	7/8	7/8	1 7/8	6 1/8	4
/Y13426	C4DRC-6408	1	1	1 7/8	6 3/8	4

**Y.G-1 TOOL CO.**

**Center Cutting End Mills**

Single-End - 6-Flute - 8% Cobalt Steel (M42)



Helical flutes. Weldon shank. For heavy hogging cuts when die-sinking or tape and tracer controlled milling. Heavy web construction. Machine ground end teeth notching. Mill dia. tolerance +.0010/- .0000. Shank dia. tolerance +.0015/- .0000. TiN and TiCN coated available.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.	No. Flutes
.....	C6ERC-B6402	2	2	2	5 3/4	4
.....	C6ERC-B6404	2	2	4	7 3/4	4
.....	C6ERC-B6405	2	2	5	8 3/4	4
.....	C6ERC-B6406	2	2	6	9 3/4	4
.....	C6ERC-B6408	2	2	8	11 3/4	4

**Y.G-1 TOOL CO.**

**Miniature End Mills**

Miniature - 2-Flute - Stub Length - 8% Cobalt Steel (M42)



Helical flutes. Weldon shank. Positive rake geometry. High helix angle. For precision component finishing. Mill dia. tolerance +.0000/- .0010. Shank dia. tolerance -.0002/- .0015. Lgth. 2". TiN and TiCN coated available.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.	No. Flutes
/Y49252	C2MSS-0201	1/32	3/16	3/64	2	2
/Y49254	C2MSS-0301	3/64	3/16	1/16	2	2
/Y49256	C2MSS-0401	1/16	3/16	3/32	2	2
/Y49258	C2MSS-0501	5/64	3/16	1/8	2	2
/Y49260	C2MSS-0601	3/32	3/16	9/64	2	2
/Y49262	C2MSS-0701	7/64	3/16	5/32	2	2
/Y49264	C2MSS-0801	1/8	3/16	3/16	2	2
/Y49266	C2MSS-0901	9/64	3/16	7/32	2	2
/Y49268	C2MSS-1001	5/32	3/16	15/64	2	2
/Y49270	C2MSS-1101	11/64	3/16	1/4	2	2
/Y49272	C2MSS-1201	3/16	3/16	9/32	2	2



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**Double-End End Mills**

Miniature - 2-Flute - Regular Length - 8% Cobalt Steel (M42)



Helical flutes. Weldon shank. For precision component finishing. Mill dia. tolerance +.0000/-.0010. Shank dia. tolerance -.0002/-.0015. TiN and TiCN coated available.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.
/Y50252	C2MRS-0201	1/32	3/16	3/32	2 1/4
/Y50254	C2MRS-0301	3/64	3/16	9/64	2 1/4
/Y50256	C2MRS-0401	1/16	3/16	3/16	2 1/4
/Y50258	C2MRS-0501	5/64	3/16	15/64	2 1/4
/Y50260	C2MRS-0601	3/32	3/16	9/32	2 1/4
/Y50262	C2MRS-0701	7/64	3/16	21/64	2 1/4
/Y50264	C2MRS-0801	1/8	3/16	3/8	2 1/4
/Y50266	C2MRS-0901	9/64	3/16	13/32	2 1/4
/Y50268	C2MRS-1001	5/32	3/16	7/16	2 1/4
/Y50270	C2MRS-1101	11/64	3/16	1/2	2 1/4
/Y50272	C2MRS-1201	3/16	3/16	1/2	2 1/4

**Y.G-1 TOOL CO.**

**Double-End End Mills**

Miniature - 2-Flute - Long Length - 8% Cobalt Steel (M42)



Helical flutes. Weldon shank. For precision component finishing. Mill dia. tolerance +.0010/-.0000. Shank dia. tolerance -.0002/-.0015. TiN and TiCN coated available.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.
/Y51256	C2MLS-0401	1/16	3/16	7/32	2 1/2
/Y51258	C2MLS-0501	5/64	3/16	1/4	2 1/2
/Y51260	C2MLS-0601	3/32	3/16	9/32	2 5/8
/Y51262	C2MLS-0701	7/64	3/16	9/32	2 5/8
/Y51264	C2MLS-0801	1/8	3/16	3/4	3 1/8
/Y51266	C2MLS-0901	9/64	3/16	3/4	3 1/8
/Y51268	C2MLS-1001	5/32	3/16	7/8	3 1/4
/Y51270	C2MLS-1101	11/64	3/16	7/8	3 1/4
/Y51272	C2MLS-1201	3/16	3/16	1	3 3/8

**Y.G-1 TOOL CO.**

**Precision End Mills**

Miniature - #560 - Double End - Stub Length - 4 Flute - R.H.



Helical flutes. Weldon shank. For precision component finishing. Mill dia. tolerance +.0000/-.0010. Shank dia. tolerance -.0002/-.0015. TiN and TiCN coated available.

8% Cobalt Steel (M42)

No.	Model No.	Cutter Dia. In.	Shank Dia. In.	Flute Lgth. In.	OA Lgth. In.
/Y52256	0401	1/16	3/16	3/32	2
/Y52258	0501	5/64	3/16	1/8	2
/Y52260	0601	3/32	3/16	9/64	2
/Y52262	0701	7/64	3/16	5/32	2
/Y52264	0801	1/8	3/16	3/16	2
/Y52266	0901	9/64	3/16	7/32	2
/Y52268	1001	5/32	3/16	15/64	2
/Y52270	1101	11/64	3/16	1/4	2
/Y52272	1201	3/16	3/16	9/32	2

High Speed Steel (M2)

No.	Model No.	Cutter Dia. In.	Shank Dia. In.	Flute Lgth. In.	OA Lgth. In.
52006	0401	1/16	3/16	3/32	2
52008	0501	5/64	3/16	1/8	2
52010	0601	3/32	3/16	9/64	2
52012	0701	7/64	3/16	5/32	2
52014	0801	1/8	3/16	3/16	2
52016	0901	9/64	3/16	7/32	2
52018	1001	5/32	3/16	15/64	2
52020	1101	11/64	3/16	1/4	2
52022	1201	3/16	3/16	9/32	2

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**Double-End End Mills**

Miniature - Regular Length - 4-Flute - 8% Cobalt Steel (M42)



Helical flutes. Weldon shank. For precision component finishing. Mill dia. tolerance +.0000/-.0010. Shank dia. tolerance -.0002/-.0015. Lgth. 2 1/4". TiN and TiCN coated available.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.
/Y53256	C4MRS-0401	1/16	3/16	3/16	2 1/4
/Y53258	C4MRS-0501	5/64	3/16	15/64	2 1/4
/Y53260	C4MRS-0601	3/32	3/16	9/32	2 1/4
/Y53262	C4MRS-0701	7/64	3/16	21/64	2 1/4
/Y53264	C4MRS-0801	1/8	3/16	3/8	2 1/4
/Y53266	C4MRS-0901	9/64	3/16	13/32	2 1/4
/Y53268	C4MRS-1001	5/32	3/16	7/16	2 1/4
/Y53270	C4MRS-1101	11/64	3/16	1/2	2 1/4
/Y53272	C4MRS-1201	3/16	3/16	1/2	2 1/4

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**Double-End End Mills**

Miniature - 4-Flute - Long Length - 8% Cobalt Steel (M42)



Helical flutes. Weldon shank. For precision component finishing. Mill dia. tolerance +.0000/-.0010. Shank dia. tolerance -.0002/-.0015. TiN and TiCN coated available.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.
/Y54256	C4MLS-0401	1/16	3/16	7/32	2 1/2
/Y54258	C4MLS-0501	5/64	3/16	1/4	2 1/2
/Y54260	C4MLS-0601	3/32	3/16	9/32	2 5/8
/Y54262	C4MLS-0701	7/64	3/16	9/32	2 5/8
/Y54264	C4MLS-0801	1/8	3/16	3/4	3 1/8
/Y54266	C4MLS-0901	9/64	3/16	3/4	3 1/8
/Y54268	C4MLS-1001	5/32	3/16	7/8	3 1/4
/Y54270	C4MLS-1101	11/64	3/16	7/8	3 1/4
/Y54272	C4MLS-1201	3/16	3/16	1	3 3/8

**MATERIALS NOT LISTED**  
All the goods we can furnish are not listed in this catalog. If you do not find everything you need, please advise us and we will promptly send manufacturers' catalogs.

**Y.G-1 TOOL CO.**

**Ball-End End Mills**

Miniature - 2-Flute - Stub Length - 8% Cobalt Steel (M42)



Helical flutes. Weldon shank. For high efficiency copying and mold corner radii cutting applications. Mill dia. tolerance +.0000/-.0010. Shank dia. tolerance -.0002/-.0015. TiN and TiCN coated available.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.
/Y55256	C2MSB-0401	1/16	3/16	3/32	2
/Y55260	C2MSB-0601	3/32	3/16	9/64	2
/Y55264	C2MSB-0801	1/8	3/16	3/16	2
/Y55268	C2MSB-1001	5/32	3/16	15/64	2
/Y55272	C2MSB-1201	3/16	3/16	9/32	2

**Y.G-1 TOOL CO.**

**Miniature Ball End End Mills**

Miniature - Double End - 2-Flute - Regular Length - 8% Cobalt Steel (M42)



Helical flutes. Weldon shank. For high efficiency copying and mold corner radii cutting applications. Mill diameter tolerance +.0000/-.0010. Shank diameter tolerance -.0002/-.0015. TiN and TiCN coated available.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.
/Y56252	C2MRB-0201	1/32	3/16	3/32	2 1/4
/Y56254	C2MRB-0301	3/64	3/16	9/64	2 1/4
/Y56256	C2MRB-0401	1/16	3/16	3/16	2 1/4
/Y56258	C2MRB-0501	5/64	3/16	15/64	2 1/4
/Y56260	C2MRB-0601	3/32	3/16	9/32	2 1/4
/Y56262	C2MRB-0701	7/64	3/16	21/64	2 1/4
/Y56264	C2MRB-0801	1/8	3/16	3/8	2 1/4
/Y56266	C2MRB-0901	9/64	3/16	13/32	2 1/4
/Y56268	C2MRB-1001	5/32	3/16	7/16	2 1/4
/Y56270	C2MRB-1101	11/64	3/16	1/2	2 1/4
/Y56272	C2MRB-1201	3/16	3/16	1/2	2 1/4

**Y.G-1 TOOL CO.**

**Ball-End End Mills**

Miniature - Double-End - 2-Flute - 8% Cobalt Steel (M42)



Helical flutes. Straight shank. For copying processes and die mold corner radius cutting. Mill dia. tolerance +.0010, -.0000/-.0002, -.0015. TiN and TiCN coated available.

No.	Model No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.
/Y57256	C2MLB-0401	1/16	3/16	7/32	2 1/2
/Y57260	C2MLB-0601	3/32	3/16	9/32	2 5/8
/Y57264	C2MLB-0801	1/8	3/16	3/4	3 1/8
/Y57268	C2MLB-1001	5/32	3/16	7/8	3 1/4
/Y57272	C2MLB-1201	3/16	3/16	1	3 3/8

**Y.G-1 TOOL CO.**

**Coarse Pitch Roughing End Mills**  
Single-End - 8% Cobalt Steel (M42)



Round profile. Weldon shank.

No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.	No. Flutes	Tol. Rge. In.
/Y60297	1/4	3/8	5/8	27/16	3	+0.030/-0.000
/Y60301	5/16	3/8	3/4	2 1/2	3	+0.030/-0.0000
/Y60305	3/8	3/8	3/4	2 1/2	4	+0.030/-0.0000
/Y60312	7/16	3/8	1	2 1/16	4	+0.030/-0.0000
/Y60321	1/2	1/2	1 1/4	3 1/4	4	+0.030/-0.0000
/Y60328	9/16	1/2	1 3/8	3 3/8	4	+0.030/-0.0000
/Y60337	5/8	5/8	1 5/8	3 3/4	4	+0.030/-0.0000
/Y60348	11/16	5/8	1 5/8	3 3/4	4	+0.030/-0.0000
/Y60358	3/4	5/8	1 5/8	3 3/4	4	+0.030/-0.0000
/Y60359	3/4	3/4	1 5/8	3 3/4	4	+0.030/-0.0000
/Y60375	13/16	3/4	1 7/8	4 1/8	4	+0.030/-0.0000
/Y60391	7/8	3/4	1 7/8	4 1/8	5	+0.030/-0.0000
/Y60394	7/8	7/8	1 7/8	4 1/8	5	+0.030/-0.0000
/Y60409	15/16	7/8	1 7/8	4 1/8	5	+0.030/-0.0000
/Y60422	1	3/4	2	4 1/4	5	+0.060/-0.0000
/Y60426	1	1	2	4 1/2	5	+0.060/-0.0000
/Y60431	1 1/8	3/4	2	4 1/4	6	+0.060/-0.0000
/Y60435	1 1/8	1	2	4 1/2	6	+0.060/-0.0000
/Y60439	1 1/4	3/4	2	4 1/4	6	+0.060/-0.0000
/Y60445	1 1/4	1 1/4	2	4 1/2	6	+0.060/-0.0000
/Y60449	1 3/8	3/4	2	4 1/4	6	+0.060/-0.0000
/Y60457	1 1/2	3/4	2	4 1/4	6	+0.060/-0.0000
/Y60461	1 1/2	1 1/4	2	4 1/2	6	+0.060/-0.0000
/Y60467	1 3/4	3/4	2	4 1/4	6	+0.060/-0.0000
/Y60469	1 3/4	1 1/4	2	4 1/2	6	+0.060/-0.0000
/Y60475	2	3/4	2	4 1/4	6	+0.060/-0.0000
/Y60477	2	1 1/4	2	4 1/2	6	+0.060/-0.0000
/Y60480	2	2	2	5 3/4	8	+0.060/-0.0000
/Y60482	2	2	3	6 3/4	8	+0.060/-0.0000
/Y60484	2	2	4	7 3/4	8	+0.060/-0.0000

**Y.G-1 TOOL CO.**

**Coarse Pitch Roughing End Mills**  
Single-End - Multiple Flutes - 8% Cobalt Steel



For high production metal removal in a wide range of work piece material. Recommended for cutting steel grades and non-ferrous materials. End tooth has center hole design for many accurate resharpenings between centers. Helical flutes. Coarse pitch. Round profile. Single end with weldon shank.

No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	O.A.L. In.	No. Flutes
/Y61426	1	1	3	5 1/2	5
/Y61445	1 1/4	1 1/4	3	5 1/2	6
/Y61461	1 1/2	1 1/4	3	5 1/2	6
/Y61488	2	2	6	9 3/4	8

**Y.G-1 TOOL CO.**

**Coarse Pitch Roughing End Mills**  
Long Length - Multiple Flute - 8% Cobalt Steel



For high production metal removal in a wide range of work piece material. Recommended for cutting steel grades and non-ferrous materials. Helical flutes.

Coarse pitch. Round profile. Single end with weldon shank. End tooth has center hole design for many accurate resharpenings between centers.

No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.	No. Flutes	Tol. Rge. In.
/Y62321	1/2	1/2	2	4	4	+0.030/-0.000
/Y62337	5/8	5/8	2 1/2	4 3/8	4	+0.030/-0.0000
/Y62358	3/4	5/8	3	5 1/8	4	+0.030/-0.0000
/Y62359	3/4	3/4	3	5 1/4	4	+0.030/-0.0000
/Y62391	7/8	3/4	3 1/2	5 3/4	5	+0.030/-0.0000
/Y62422	1	3/4	4	6 1/4	5	+0.060/-0.0000
/Y62426	1	1	4	6 1/2	5	+0.060/-0.0000
/Y62445	1 1/4	3/4	4	6 1/4	6	+0.060/-0.0000
/Y62457	1 1/2	3/4	4	6 1/4	6	+0.060/-0.0000
/Y62461	1 1/2	1 1/4	4	6 1/2	6	+0.060/-0.0000
/Y62469	1 3/4	1 1/4	4	6 1/2	6	+0.060/-0.0000
/Y62477	2	1 1/4	4	6 1/2	6	+0.060/-0.0000
/Y62490	2	2	8	11 3/4	8	+0.060/-0.0000

**Y.G-1 TOOL CO.**

**Coarse Pitch Roughing End Mills**  
Single End - Cobalt - Stub Length - 3 Flute - R.H.



For high production metal removal in cutting steel grade and non-ferrous materials. Helical flutes. Coarse pitch. Round profile. Single end with weldon shank.

8% Cobalt Steel

No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	O.A.L. In.	Tol. Rge. In.
.....	1/4	3/8	1/4	2 1/16	+0.030/-0.0000
.....	3/8	3/8	3/8	2 5/32	+0.030/-0.0000
.....	1/2	1/2	1/2	2 1/2	+0.030/-0.0000
.....	5/8	5/8	5/8	2 3/4	+0.030/-0.0000
.....	3/4	3/4	3/4	2 7/8	+0.030/-0.0000
.....	1	1	1	3 1/2	+0.060/-0.0000

**Y.G-1 TOOL CO.**

**Center Cutting Roughing End Mills**  
Single End - Cobalt - Regular Length - Multi Flute - Coarse Pitch - R.H.



For high production metal removal in cutting steel grades and nonferrous materials. Helical flutes. Center cutting. Coarse pitch. Round profile. Single end with weldon shank.

8% Cobalt Steel

No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.	No. Flutes	Tol. Rge. In.
.....	1/2	1/2	1 1/4	3 1/4	4	+0.030/-0.0000
.....	5/8	5/8	1 5/8	3 3/4	4	+0.030/-0.0000
.....	3/4	3/4	1 5/8	3 7/8	4	+0.030/-0.0000
.....	1	1	2	4 1/2	5	+0.060/-0.0000
.....	1 1/4	1 1/4	2	4 1/2	6	+0.060/-0.0000
.....	1 1/2	1 1/4	2	4 1/2	6	+0.060/-0.0000

**Y.G-1 TOOL CO.**

**Center Cutting Coarse Pitch Roughing End Mills**

Single End - Cobalt - Long Length - Multi Flutes - R.H.



For high production metal removal in cutting steel grade and non-ferrous metal work pieces. Helical flutes. Center cutting. Coarse pitch. Round profile. Single end with weldon shank.

8% Cobalt Steel

No.	Mill Dia. In.	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.	No. Flutes	Tol. Rge. In.
.....	1/2	1/2	2	4	4	+0.030/-0.0000
.....	5/8	5/8	2 1/2	4 3/8	4	+0.030/-0.0000
.....	3/4	3/4	3	5 1/4	4	+0.030/-0.0000
.....	1	1	4	6 1/2	5	+0.060/-0.0000
.....	1 1/4	1 1/4	4	6 1/2	6	+0.060/-0.0000
.....	1 1/2	1 1/4	4	6 1/2	6	+0.060/-0.0000

**Y.G-1 TOOL CO.**

**Metric General Purpose End Mills**  
2-Flute - Metric - 8% Cobalt Steel (M42)



Use for slotting operations, pocketing key-way cutting, plunge cutting and other general purpose work. Mill dia. tolerance +.0010, -.0000/+0.0015, -.0000. TiN and TiCN coated available.

No.	Model No.	Mill Dia. mm	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.
.....	C2TRA-02003	2.0	3/8	5/16	2 5/16
.....	C2TRA-02503	2.5	3/8	5/16	2 5/16
.....	C2TRA-03003	3.0	3/8	5/16	2 5/16
.....	C2TRA-03503	3.5	3/8	7/16	2 5/16
.....	C2TRA-04003	4.0	3/8	7/16	2 5/16
.....	C2TRA-04503	4.5	3/8	1/2	2 5/16
.....	C2TRA-05003	5.0	3/8	1/2	2 5/16
.....	C2TRA-05503	5.5	3/8	1/2	2 5/16
.....	C2TRA-06003	6.0	3/8	1/2	2 5/16
.....	C2TRA-07003	7.0	3/8	9/16	2 5/16
.....	C2TRA-08003	8.0	3/8	9/16	2 5/16
.....	C2TRA-09003	9.0	3/8	9/16	2 5/16
.....	C2TRA-10003	10.0	3/8	1 3/16	2 1/2
.....	C2TRA-11003	11.0	3/8	1 3/16	2 1/2
.....	C2TRA-12003	12.0	3/8	1 3/16	2 1/2
.....	C2TRA-12504	12.5	1/2	1 1/8	3 1/8
.....	C2TRA-13004	13.0	1/2	1 1/8	3 1/8
.....	C2TRA-14004	14.0	1/2	1 1/8	3 1/8
.....	C2TRA-16005	16.0	5/8	1 5/16	3 7/16
.....	C2TRA-18005	18.0	5/8	1 5/16	3 7/16
.....	C2TRA-20005	20.0	5/8	1 1/2	3 3/4
.....	C2TRA-22006	22.0	3/4	1 1/2	3 3/4
.....	C2TRA-24006	24.0	3/4	2	4 1/2
.....	C2TRA-25008	25.0	1	2	4 1/2
.....	C2TRA-32008	32.0	1	2	4 1/2
.....	C2TRA-36008	36.0	1	2	4 1/2
.....	C2TRA-40010	40.0	1 1/4	2	4 1/2
.....	C2TRA-45010	45.0	1 1/4	2	4 1/2



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**Y.G-1 TOOL CO.**

**Metric Weldon Shank End Mills**  
4-Flute - Metric - 8% Cobalt Steel (M42)



Uses include slotting, shallow pocketing and tracer milling. Mill dia. tolerance +.0010, -.0000/+ .0015, -.0000.

No.	Model No.	UPC	Mill Dia. mm	Shank Dia. In.	Cut Lgth. In.	OA Lgth. In.
.....	C4TRA-02003	16252	2.0	3/8	3/8	2 5/16
.....	C4TRA-02503	16253	2.5	3/8	3/8	2 5/16
.....	C4TRA-03003	16254	3.0	3/8	3/8	2 5/16
.....	C4TRA-03503	16255	3.5	3/8	1/2	2 3/8
.....	C4TRA-04003	16256	4.0	3/8	1/2	2 3/8
.....	C4TRA-04503	16257	4.5	3/8	9/16	2 1/2
.....	C4TRA-05003	16258	5.0	3/8	9/16	2 1/2
.....	C4TRA-05503	16259	5.5	3/8	5/8	2 1/2
.....	C4TRA-06003	16260	6.0	3/8	5/8	2 1/2
.....	C4TRA-07003	16261	7.0	3/8	1 1/16	2 1/2
.....	C4TRA-08003	16262	8.0	3/8	3/4	2 1/2
.....	C4TRA-09003	16263	9.0	3/8	3/4	2 1/2
.....	C4TRA-10003	16264	10.0	3/8	1	2 1 1/16
.....	C4TRA-11003	16265	11.0	3/8	1	2 1 1/16
.....	C4TRA-12003	16266	12.0	3/8	1	2 1 1/16
.....	C4TRA-12504	16267	12.5	1/2	1 1/4	3 1/4
.....	C4TRA-13004	16268	13.0	1/2	1 1/4	3 1/4
.....	C4TRA-14004	16270	14.0	1/2	1 3/8	3 3/8
.....	C4TRA-16005	16276	16.0	5/8	1 5/8	3 3/4
.....	C4TRA-18005	16280	18.0	5/8	1 5/8	3 3/4
.....	C4TRA-20005	16282	20.0	5/8	1 7/8	4 1/8
.....	C4TRA-22006	16284	22.0	3/4	1 7/8	4 1/8
.....	C4TRA-24006	16288	24.0	3/4	2	4 1/2
.....	C4TRA-25008	16290	25.0	1	2	4 1/2
.....	C4TRA-32008	16296	32.0	1	2	4 1/2
.....	C4TRA-36008	16298	36.0	1	2	4 1/2
.....	C4TRA-40010	16300	40.0	1 1/4	2	4 1/2
.....	C4TRA-45010	16302	45.0	1 1/4	2	4 1/2

**RADIUS CUTTING END MILLS**  
4-Flutes



Four flutes with Weldon shank. TiN and TiCN coated available upon request.

No.	Model No.	Rad. In.	Shank Dia. In.	Lgth. Dia. In.	O.A.L. In.
6R37ECCR	C4RDG-2803	1/16	3/8	7/16	2 1/2
9R37ECCR	C4RDG-3203	3/32	3/8	1/2	2 1/2
12R50ECCR	C4RDG-4004	1/8	1/2	5/8	3
15R50ECCR	C4RDG-4804	5/32	1/2	3/4	3
18R50ECCR	C4RDG-5604	3/16	1/2	7/8	3
.....	C4RDG-5606	3/16	3/4	7/8	3 3/8
.....	C4RDG-5604R	7/32	1/2	7/8	3 1/4
25R50ECCR	C4RDG-6404	1/4	1/2	1	3
.....	C4RDG-6405	9/32	5/8	1	3
.....	C4RDG-6406	1/4	3/4	1	3 1/4
31R50ECCR	C4RDG-B0804	5/16	1/2	1 1/8	3 1/4
.....	C4RDG-B0805	5/16	5/8	1 1/8	3 1/2
.....	C4RDG-B0806	5/16	3/4	1 1/8	3 1/2
.....	C4RDG-B0807	5/16	7/8	1 1/8	3 1/2
37R50ECCR	C4RDG-B1604	3/8	1/2	1 1/4	3 1/2
.....	C4RDG-B1606	3/8	3/4	1 1/4	3 3/4
.....	C4RDG-B1607	3/8	7/8	1 1/4	3 3/4
.....	C4RDG-B2406	7/16	3/4	1 3/8	3 3/4
.....	C4RDG-B2408	7/16	1	1 3/8	4
50R75ECCR	C4RDG-B3206	1/2	3/4	1 1/2	3 7/8
.....	C4RDG-B3208	1/2	1	1 1/2	4 1/8
.....	C4RDG-B4006	5/8	3/4	1 5/8	4
.....	C4RDG-B4008	5/8	1	1 5/8	4
.....	C4RDG-B6006	5/8	3/4	1 15/16	4
.....	C4RDG-B6008	5/8	1	1 15/16	4 1/4
.....	C4RDG-B5606	3/4	3/4	1 7/8	4
.....	C4RDG-B5608	3/4	1	1 7/8	4

No.	Model No.	Rad. In.	Shank Dia. In.	Lgth. Dia. In.	O.A.L. In.
.....	C4RDG-C1606	3/4	3/4	2 1/4	4 1/8
.....	C4RDG-C1608	3/4	1	2 1/4	4 5/16
.....	C4RDG-C3206	7/8	3/4	2 1/2	4 1/2
.....	C4RDG-C4006	1	3/4	2 5/8	4 1/2
.....	C4RDG-C4808	1	1	2 3/4	4 3/4

**CHUCKING REAMERS**

List 224 - HSS - Straight Flute - Fractional Sizes



No.	Min. Shank Dia. In.	Max. Shank Dia. In.	Flute Lgth. In.	OA Lgth. In.	No. Flutes	
.....	1/32	.0280	.0290	1/2	2 1/4	4
.....	3/64	.0445	.0455	1/2	2 1/2	4
6RRCS	1/16	.0575	.0585	1/2	2 1/2	4
7RRCS	5/64	.0710	.0720	3/4	3	4
9RRCS	3/32	.0870	.0880	3/4	3	4
10RRCS	7/64	.1020	.1030	7/8	3 1/2	4
12RRCS	1/8	.1180	.1190	7/8	3 1/2	4
14RRCS	9/64	.1340	.1350	1	4	4
15RRCS	5/32	.1500	.1510	1	4	6
17RRCS	11/64	.1635	.1645	1 1/8	4 1/2	6
18RRCS	3/16	.1795	.1805	1 1/8	4 1/2	6
20RRCS	13/64	.1935	.1945	1 1/4	5	6
21RRCS	7/32	.2065	.2075	1 1/4	5	6
23RRCS	15/64	.2255	.2265	1 1/2	6	6
25RRCS	1/4	.2395	.2405	1 1/2	6	6
26RRCS	17/64	.2475	.2485	1 1/2	6	6
28RRCS	9/32	.2475	.2485	1 1/2	6	6
29RRCS	19/64	.2782	.2792	1 1/2	6	6
31RRCS	5/16	.2782	.2792	1 1/2	6	6
32RRCS	21/64	.2782	.2792	1 1/2	6	6
34RRCS	11/32	.2782	.2792	1 1/2	6	6
35RRCS	23/64	.3095	.3105	1 3/4	7	6
37RRCS	3/8	.3095	.3105	1 3/4	7	6
39RRCS	29/64	.3095	.3105	1 3/4	7	6
40RRCS	13/32	.3095	.3105	1 3/4	7	6
42RRCS	27/64	.3720	.3730	1 3/4	7	6
43RRCS	7/16	.3720	.3730	1 3/4	7	6
45RRCS	29/64	.3720	.3730	1 3/4	7	6
46RRCS	15/32	.3720	.3730	1 3/4	7	6
48RRCS	31/64	.4345	.4355	2	8	6
50RRCS	1/2	.4345	.4355	2	8	6
53RRCS	17/32	.4345	.4355	2	8	6
56RRCS	9/16	.4345	.4355	2	8	6
59RRCS	19/32	.4345	.4355	2	8	6
62RRCS	5/8	.5605	.5620	2 1/4	9	6
65RRCS	21/32	.5605	.5620	2 1/4	9	8
68RRCS	11/16	.5605	.5620	2 1/4	9	8
71RRCS	23/32	.5605	.5620	2 1/4	9	8
75RRCS	3/4	.6230	.6245	2 1/2	9 1/2	8
78RRCS	25/32	.6230	.6245	2 1/2	9 1/2	8
81RRCS	13/16	.6230	.6245	2 1/2	9 1/2	8
84RRCS	27/32	.6230	.6245	2 1/2	9 1/2	8
87RRCS	7/8	.7480	.7495	2 5/8	10	8
90RRCS	29/32	.7480	.7495	2 5/8	10	8
93RRCS	15/16	.7480	.7495	2 5/8	10	8

**CHUCKING REAMERS**

List 224L - Letter Sizes - HSS



Straight flute. Straight shank. 6 flutes. 1/pkg.

No.	Letter Size	Min. Shank Dia. In.	Max. Shank Dia. In.	Flute Lgth. In.	OA Lgth. In.
.....	A	.2255	.2265	1 1/2	6
.....	B	.2319	.2329	1 1/2	6
.....	C	.2319	.2329	1 1/2	6
.....	D	.2319	.2329	1 1/2	6
.....	E	.2395	.2405	1 1/2	6

No.	Letter Size	Min. Shank Dia. In.	Max. Shank Dia. In.	Flute Lgth. In.	OA Lgth. In.
.....	F	.2475	.2485	1 1/2	6
.....	G	.2475	.2485	1 1/2	6
.....	H	.2475	.2485	1 1/2	6
.....	I	.2475	.2485	1 1/2	6
.....	J	.2475	.2485	1 1/2	6
.....	K	.2475	.2485	1 1/2	6
.....	L	.2782	.2792	1 1/2	6
.....	M	.2782	.2792	1 1/2	6
.....	N	.2782	.2792	1 1/2	6
.....	O	.2782	.2792	1 1/2	6
.....	P	.2782	.2792	1 1/2	6
.....	Q	.2782	.2792	1 1/2	6
.....	R	.2782	.2792	1 1/2	6
.....	S	.2782	.2792	1 1/2	6
.....	T	.2782	.2792	1 1/2	6
.....	U	.2782	.2792	1 1/2	6
.....	V	.3095	.3105	1 3/4	7
.....	W	.3095	.3105	1 3/4	7
.....	X	.3095	.3105	1 3/4	7
.....	Y	.3095	.3105	1 3/4	7
.....	Z	.3720	.3730	1 3/4	7

**CHUCKING REAMERS**

List 224W - Wire Gauge Sizes - HSS



Straight flute. Straight shank. 1/pkg.

No.	Wire Gauge No.	Min. Shank Dia. In.	Max. Shank Dia. In.	Flute Lgth. In.	OA Lgth. In.	No. Flutes
.....	1	.2163	.2173	1 1/2	6	6
.....	2	.2163	.2173	1 1/2	6	6
.....	3	.2065	.2075	1 1/4	5	6
.....	4	.2006	.2016	1 1/4	5	6
.....	5	.2006	.2016	1 1/4	5	6
.....	6	.1935	.1945	1 1/4	5	6
.....	7	.1935	.1945	1 1/4	5	6
.....	8	.1885	.1895	1 1/4	5	6
.....	9	.1885	.1895	1 1/4	5	6
.....	10	.1850	.1860	1 1/4	5	6
.....	11	.1850	.1860	1 1/4	5	6
.....	12	.1795	.1805	1 1/8	4 1/2	6
.....	13	.1795	.1805	1 1/8	4 1/2	6
.....	14	.1745	.1755	1 1/8	4 1/2	6
.....	15	.1745	.1755	1 1/8	4 1/2	6
.....	16	.1694	.1704	1 1/8	4 1/2	6
.....	17	.1635	.1645	1 1/8	4 1/2	6
.....	18	.1585	.1595	1 1/8	4 1/2	6
.....	19	.1585	.1595	1 1/8	4 1/2	6
.....	20	.1520	.1530	1 1/8	4 1/2	6
.....	21	.1520	.1530	1 1/8	4 1/2	6
.....	22	.1500	.1510	1	4	6
.....	23	.1450	.1460	1	4	4
.....	24	.1450	.1460	1	4	4
.....	25	.1420	.1430	1	4	4
.....	26	.1420	.1430	1	4	4
.....	27	.1340	.1350	1	4	4
.....	28	.1340	.1350	1	4	4
.....	29	.1265	.1275	1	4	4
.....	30	.1180	.1190	7/8	3 1/2	4
.....	31	.1110	.1120	7/8	3 1/2	4
.....	32	.1110	.1120	7/8	3 1/2	4
.....	33	.1045	.1055	7/8	3 1/2	4
.....	34	.1045	.1055	7/8	3 1/2	4
.....	35	.1020	.1030	7/8	3 1/2	4
.....	36	.1020	.1030	7/8	3 1/2	4
.....	37	.0940	.0950	7/8	3 1/2	4
.....	38	.0940	.0950	7/8	3 1/2	4
.....	39	.0918	.0928	7/8	3 1/2	4
.....	40	.0918	.0928	7/8	3 1/2	4
.....	41	.0918	.0928	7/8	3 1/2	4

Continued from previous page

No.	Wire Gauge	Min. Shank Dia. In.	Max. Shank Dia. In.	Flute Lgth. In.	OA Lgth. In.	No. Flutes
.....	47	.0710	.0720	3/4	3	4
.....	48	.0710	.0720	3/4	3	4
.....	49	.0650	.0660	3/4	3	4
.....	50	.0650	.0660	3/4	3	4
.....	51	.0650	.0660	3/4	3	4
.....	52	.0575	.0585	1/2	2 1/2	4
.....	53	.0575	.0585	1/2	2 1/2	3
.....	54	.0500	.0510	1/2	2 1/2	3
.....	55	.0500	.0510	1/2	2 1/2	3
.....	56	.0445	.0455	1/2	2 1/2	3
.....	57	.0380	.0390	1/2	2 1/2	3
.....	58	.0380	.0390	1/2	2 1/2	3
.....	59	.0380	.0390	1/2	2 1/2	3
.....	60	.0380	.0390	1/2	2 1/2	3

**CHUCKING REAMERS**

List 227 - Straight Shank - Common Decimal Sizes - HSS



Straight flute. 6 flutes. 1/pkg.

No.	Dia. In.	Min. Shank Dia. In.	Max. Shank Dia. In.	Flute Lgth. In.	OA Lgth. In.
.....	.1240	.1180	.1190	7/8	3 1/2
.....	.1260	.1180	.1190	7/8	3 1/2
/6801865	.1865	.1795	.1805	1 1/8	4 1/2
/6801885	.1885	.1795	.1805	1 1/8	4 1/2
/680249	.2490	.2395	.2405	1 1/2	6
/680251	.2510	.2395	.2405	1 1/2	6
/6803115	.3115	.2782	.2792	1 1/2	6
/6803135	.3135	.2782	.2792	1 1/2	6
.....	.3740	.3095	.3105	1 3/4	7
/680376	.3760	.3095	.3105	1 3/4	7
/6804365	.4365	.3720	.3730	1 3/4	7
/6804385	.4385	.3720	.3730	1 3/4	7
.....	.4990	.4345	.4355	2	8
.....	.5010	.4345	.4355	2	8

**CHUCKING REAMERS**

List 225 - Straight Shank - Dowel Pin Sizes - HSS



Straight flute. 6 flutes. 1/pkg.

No.	Dia. In.	Min. Shank Dia. In.	Max. Shank Dia. In.	Flute Lgth. In.	OA Lgth. In.
/6801230	.1230	.1180	.1190	7/8	3 1/2
/6801247	.1247	.1180	.1190	7/8	3 1/2
/6801855	.1855	.1795	.1805	1 1/8	4 1/2
/6801870	.1870	.1795	.1805	1 1/8	4 1/2
.....	.2480	.2395	.2405	1 1/2	6
/6802495	.2495	.2395	.2405	1 1/2	6
/6803105	.3105	.2782	.2792	1 1/2	6
/6803120	.3120	.2782	.2792	1 1/2	6
.....	.3730	.3095	.3105	1 3/4	7
/6803745	.3745	.3095	.3105	1 3/4	7
/6804355	.4355	.3720	.3730	1 3/4	7
/6804370	.4370	.3720	.3730	1 3/4	7
/6804980	.4980	.4345	.4355	2	8
/6804955	.4955	.4345	.4355	2	8

**CHUCKING REAMERS**

List 224A - HSS



Straight flute. Taper shank. 1/pkg.

No.	Dia. In.	Dec. Equiv. In.	No. Flutes	Flute Lgth. In.	Lgth. In.	Taper Shank
25RRCT	1/4	.2500	6	1 1/2	6	1
31RRCT	9/16	.3125	6	1 1/2	6	1
37RRCT	3/8	.3750	6	1 3/4	7	1
43RRCT	7/16	.4375	6	1 3/4	7	1
.....	1/8	.5000	6	2	8	1
53RRCT	17/32	.5313	6	2	8	1
56RRCT	9/16	.5625	6	2	8	1
59RRCT	19/32	.5938	6	2	8	1
62RRCT	5/8	.6250	6	2 1/4	9	2
65RRCT	21/32	.6562	8	2 1/4	9	2
68RRCT	11/16	.6875	8	2 1/4	9	2
71RRCT	23/32	.7188	8	2 1/4	9	2
78RRCT	25/32	.7812	8	2 1/2	9 1/2	2
81RRCT	13/16	.8125	8	2 1/2	9 1/2	2
84RRCT	27/32	.8438	8	2 1/2	9 1/2	2
87RRCT	7/8	.8750	8	2 5/8	10	2
90RRCT	29/32	.9062	8	2 5/8	10	2
93RRCT	15/16	.9375	8	2 5/8	10	3
96RRCT	31/32	.9688	8	2 5/8	10	3
100RRCT	1	1.0000	8	2 3/4	10 1/2	3
106RRCT	1 1/16	1.0625	8	2 3/4	10 1/2	3
112RRCT	1 1/8	1.1250	8	2 7/8	11	3
118RRCT	1 1/4	1.1875	10	2 7/8	11	3
125RRCT	1 1/4	1.2500	10	3	11 1/2	4
131RRCT	1 5/16	1.3125	10	3	11 1/2	4
137RRCT	1 3/8	1.3750	10	3 1/4	12	4
143RRCT	1 7/16	1.4375	10	3 1/4	12	4
150RRCT	1 1/2	1.5000	10	3 1/2	12 1/2	4

**TAPER PIN REAMERS**

HSS

Straight Flute Reamers



List 275

List 275. Straight flute. Squared shank. 1/pkg.

No.	Shank Size	Nom. Small Dia. In.	Nom. End Dia. In.	Nom. Lg. End Dia. In.	Flute Lgth. In.	OA Lgth. In.	No. Flutes
/6817/0	7/0	5/64	.0497	.0666	1 3/16	1 13/16	4
/6816/0	6/0	3/32	.0611	.0806	1 5/16	1 15/16	4
/6815/0	5/0	7/64	.0719	.0966	1 3/16	2 3/16	4
/6814/0	4/0	1/8	.0869	.1142	1 5/16	2 5/16	4
/6813/0	3/0	9/64	.1029	.1302	1 5/16	2 5/16	6
/6812/0	2/0	5/32	.1137	.1462	1 9/16	2 9/16	6
/68100	0	11/64	.1287	.1638	1 11/16	2 15/16	6
/68101	1	3/16	.1447	.1798	1 11/16	2 15/16	6
/68102	2	13/64	.1605	.2008	1 15/16	3 3/16	6
/68103	3	15/64	.1813	.2294	2 5/16	3 11/16	6
/68104	4	17/64	.2071	.2604	2 9/16	4 1/16	6
/68105	5	5/16	.2409	.2994	2 13/16	4 5/16	6
/68106	6	23/64	.2773	.3540	3 11/16	5 7/16	6
/68107	7	13/32	.3297	.4220	4 7/16	6 9/16	6
/68108	8	7/16	.3971	.5050	5 3/16	7 3/16	6
/68109	9	9/16	.4805	.6066	6 1/16	8 3/16	6
/68110	10	5/8	.5799	.7216	6 13/16	9 3/16	8

**HAND REAMERS**

List 220 - Squared Shank - HSS



Straight flute. 1/pkg.

No.	Dia. In.	Shank Dia. In.	Square Size In.	Flute Lgth. In.	OA Lgth. In.	No. Flutes
12RRHD	1/8	1/8	.095	5/32	1 1/2	3
.....	5/32	5/32	.115	7/32	1 5/8	3 1/4
18RRHD	3/16	3/16	.140	7/32	1 3/4	3 1/2
.....	7/32	7/32	.165	1/4	1 7/8	3 3/4
25RRHD	1/4	1/4	.185	1/4	2	4
.....	9/32	9/32	.210	1/4	2 1/8	4 1/4
31RRHD	5/16	5/16	.235	5/16	2 1/4	4 1/2
.....	11/32	11/32	.255	5/16	2 3/8	4 3/4
37RRHD	3/8	3/8	.280	3/8	2 1/2	5
.....	13/32	13/32	.305	3/8	2 5/8	5 1/4
43RRHD	7/16	7/16	.330	7/16	2 3/4	5 1/2
.....	15/32	15/32	.350	7/16	2 7/8	5 3/4
50RRHD	1/2	1/2	.375	1/2	3	6
.....	17/32	17/32	.400	1/2	3 1/8	6 1/4
56RRHD	9/16	9/16	.420	9/16	3 1/4	6 1/2
.....	19/32	19/32	.445	9/16	3 3/8	6 3/4
62RRHD	5/8	5/8	.470	5/8	3 1/2	7
.....	21/32	21/32	.490	5/8	3 11/16	7 3/8
68RRHD	11/16	11/16	.515	11/16	3 7/8	7 3/4
.....	23/32	23/32	.540	11/16	4 1/16	8 1/8
75RRHD	3/4	3/4	.560	3/4	4 3/16	8 3/8
.....	13/16	13/16	.610	13/16	4 9/16	9 1/8
87RRHD	7/8	7/8	.655	7/8	4 7/8	9 3/4
.....	15/16	15/16	.705	15/16	5 1/8	10 1/4
.....	1	1	.750	1	5 1/2	10 7/8
.....	1 1/8	1 1/8	.845	1	5 13/16	11 5/8
.....	1 1/4	1 1/4	.935	1	6 1/8	12 1/4
.....	1 3/8	1 3/8	1.030	1	6 9/16	12 5/8
.....	1 1/2	1 1/2	1.125	1 1/8	6 1/2	13

**BRIDGE REAMERS**

HSS - w/Taper Shanks



List 232

List 232. Straight flute. 1/pkg.

Straight Flute

No.	Full Dia. In.	Point Dia. In.	Flute Lgth. In.	OA Lgth. In.	Taper Shank	No. Flutes
.....	7/16	1/4	4 3/8	8 1/4	2	5
56RRBS	9/16	11/32	5 1/8	9	2	5
68RRBS	1 1/16	25/64	7 1/8	11 3/4	3	5
81RRBS	1 3/16	1/2	7 3/8	12	3	5
93RRBS	1 5/16	5/8	7 3/8	12	3	5
106RRBS	1 11/16	3/4	7 3/8	12	3	5
118RRBS	1 3/8	7/8	7 3/8	12	3	5
.....	1 5/16	1	7 3/8	13	4	5



List 232A

List 232A. Left hand helical flute. 1/pkg.

LH Helical Flute

No.	Full Dia. In.	Point Dia. In.	Flute Lgth. In.	OA Lgth. In.	Taper Shank	No. Flutes
.....	7/16	1/4	4 3/8	8 1/4	2	4
.....	1/2	9/32	5 1/8	9	2	4
.....	9/16	11/32	5 1/8	9	2	5
.....	5/8	3/8	6 1/8	10	2	5
.....	11/16	25/64	7 1/8	11 3/4	3	5
.....	3/4	7/16	7 3/8	12	3	5
.....	13/16	1/2	7 3/8	12	3	5
.....	7/8	9/16	7 3/8	12	3	5
.....	15/16	5/8	7 3/8	12	3	5
.....	1	1 1/16	7 3/8	12	3	5
.....	1 1/16	3/4	7 3/8	12	3	5
.....	1 1/8	13/16	7 3/8	12	3	5

Continued on next page



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No.	Full Dia. In.	Point Dia. In.	Flute Lgth. In.	OA Lgth. In.	Taper Shank	No. Flutes
.....	13/16	7/8	73/8	12	3	5
.....	1/4	15/16	73/8	13	4	5
.....	15/16	1	73/8	13	4	5

**EXPANSION HAND REAMERS**



6 Flutes

No.	Dia. In.	Flute Lgth. In.	Lgth. In.
.....	1/4	1 1/2	4
.....	9/32	1 1/2	4
.....	5/16	1 1/2	4
.....	11/32	1 1/2	4
.....	3/8	2	5
.....	13/32	2	5
.....	7/16	2	5
.....	15/32	2	5
.....	1/2	2 1/2	6

Note: .2500-.5625 Dia.

8 Flutes

No.	Dia. In.	Flute Lgth. In.	Lgth. In.
.....	9/16	2 1/2	6
.....	5/8	3	7
.....	11/16	3	7
.....	3/4	3 1/2	8
.....	13/16	3 1/2	8
.....	7/8	4	9
.....	15/16	4	9
.....	1	4 1/2	10

Note: .6250-1.000 Dia.

10 Flutes

No.	Dia. In.	Flute Lgth. In.	Lgth. In.
.....	1 1/16	4 1/2	10
.....	1 1/8	4 3/4	10 1/2
.....	1 3/16	4 3/4	10 1/2

Note: 1.0625-1.3750 Dia.

12 Flutes

No.	Dia. In.	Flute Lgth. In.	Lgth. In.
.....	1 1/4	5	11
.....	1 5/16	5	11
.....	1 3/8	5 1/4	11 1/2
.....	1 7/16	5 1/4	11 1/2
.....	1 1/2	5 1/2	12
.....	1 9/16	5 1/2	12
.....	1 5/8	5 3/4	12 1/2
.....	1 11/16	5 3/4	12 1/2
.....	1 3/4	6	13
.....	1 13/16	6	13
.....	1 7/8	6 1/4	13 1/2
.....	1 15/16	6 1/4	13 1/2
.....	2	6 1/2	14

Note: 1.4375-1.8125 Dia.

**CHUCKING REAMERS  
Series 70 - Straight Shank**



Expansion. High Speed Steel. Straight Flute.

No.	Size In.	M.T. Shank Series 071	Flute Lgth. In.	Lgth. In.
.....	3/8	1	3/4	7
.....	13/32	1	3/4	7
.....	7/16	1	7/8	7
.....	15/32	1	7/8	7
.....	1/2	1	1	8
.....	17/32	1	1	8
.....	9/16	1	1 1/8	8
.....	19/32	1	1 1/8	8
.....	5/8	2	1 1/4	9
.....	21/32	2	1 1/4	9
.....	11/16	2	1 1/4	9
.....	23/32	2	1 1/4	9
.....	3/4	2	1 3/8	9 1/2
.....	25/32	2	1 3/8	9 1/2
.....	13/16	2	1 3/8	9 1/2
.....	27/32	2	1 3/8	9 1/2
.....	7/8	2	1 1/2	10
.....	29/32	2	1 1/2	10
.....	15/16	3	1 1/2	10
.....	31/32	3	1 1/2	10
.....	1	3	1 5/8	10 1/2
.....	1 1/32	3	1 5/8	10 1/2
.....	1 1/16	3	1 5/8	10 1/2
.....	1 3/32	3	1 5/8	10 1/2
.....	1 1/8	3	1 3/4	11
.....	1 5/32	3	1 3/4	11
.....	1 1/4	3	1 3/4	11
.....	1 1/16	4	1 3/4	11
.....	1 1/4	4	1 7/8	11 1/2
.....	1 5/16	4	1 7/8	11 1/2
.....	1 3/8	4	2	12
.....	1 7/16	4	2	12
.....	1 1/2	4	2 1/8	12 1/2
.....	1 9/16	4	2 1/8	12 1/2
.....	1 5/8	4	2 1/4	13
.....	1 11/16	4	2 1/4	13
.....	1 3/4	5	2 3/8	13 1/2
.....	1 13/16	5	2 3/8	13 1/2
.....	1 7/8	5	2 1/2	14
.....	1 15/16	5	2 1/2	14
.....	2	5	2 1/2	14

**CHUCKING REAMERS  
Series 71 - Taper Shank**



Expansion. High Speed Steel. Straight Flute.

No.	Size In.	M.T. Shank Series 071	Flute Lgth. In.	Lgth. In.
37RRET	3/8	1	3/4	7
40RRET	13/32	1	3/4	7
43RRET	7/16	1	7/8	7
46RRET	15/32	1	7/8	7
50RRET	1/2	1	1	8
53RRET	17/32	1	1	8
56RRET	9/16	1	1 1/8	8
59RRET	19/32	1	1 1/8	8
62RRET	5/8	2	1 1/4	9
65RRET	21/32	2	1 1/4	9
68RRET	11/16	2	1 1/4	9
71RRET	23/32	2	1 1/4	9
75RRET	3/4	2	1 3/8	9 1/2
78RRET	25/32	2	1 3/8	9 1/2
81RRET	13/16	2	1 3/8	9 1/2
84RRET	27/32	2	1 3/8	9 1/2
87RRET	7/8	2	1 1/2	10
90RRET	29/32	2	1 1/2	10
93RRET	15/16	3	1 1/2	10
96RRET	31/32	3	1 1/2	10
100RRET	1	3	1 5/8	10 1/2
.....	1 1/32	3	1 5/8	10 1/2
106RRET	1 1/16	3	1 5/8	10 1/2
.....	1 3/32	3	1 5/8	10 1/2

No.	Size In.	M.T. Shank Series 071	Flute Lgth. In.	Lgth. In.
112RRET	1 1/8	3	1 3/4	11
115RRET	1 5/32	3	1 3/4	11
118RRET	1 3/16	3	1 3/4	11
.....	1 7/32	4	1 3/4	11
125RRET	1 1/4	4	1 7/8	11 1/2
131RRET	1 5/16	4	1 7/8	11 1/2
137RRET	1 3/8	4	2	12
143RRET	1 7/16	4	2	12
150RRET	1 1/2	4	2 1/8	12 1/2
156RRET	1 9/16	4	2 1/8	12 1/2
162RRET	1 5/8	4	2 1/4	13
168RRET	1 11/16	4	2 1/4	13
175RRET	1 3/4	5	2 3/8	13 1/2
181RRET	1 13/16	5	2 3/8	13 1/2
187RRET	1 7/8	5	2 1/2	14
193RRET	1 15/16	5	2 1/2	14
200RRET	2	5	2 1/2	14

**YANKEE CORP.**

**Socket Capscrew Counterbores**

High speed steel.

No.	Pilot Size In.	Pilot Lgth. In.	Flute Size In.	Body Lgth. In.	Shank Dia. In.	OA Lgth. In.
1/32" os						
4CCB3	.1430	1/8	.2150	9/16	.1562	3/8
5CCB3	.1560	5/32	.2370	5/8	.1875	4/8
6CCB3	.1690	3/16	.2590	3/4	.2188	4 5/8
8CCB3	.1960	7/32	.3020	3/4	.2500	5
25CCB3	.2810	3/32	.4120	1	.3125	5 5/8
31CCB3	.3430	5/16	.5040	1	.3750	6 1/8
37CCB3	.4060	3/8	.6010	1 1/4	.5000	6 1/2
43CCB3	.4680	7/16	.6910	1 1/4	.5000	7
50CCB3	.5310	1/2	.7870	1 1/2	.5000	7 1/2
62CCB3	.6560	5/8	1.0000	1 1/2	.6250	7 5/8
75CCB3	.7810	3/4	1.1880	1 5/8	.7500	7 3/4
87CCB3	.9060	7/8	1.3750	1 7/8	.8750	8
100CCB3	1.0310	1	1.5830	2	1.0000	8 1/2
10FCB3	.2210	1/4	.3440	7/8	.2812	5 1/4
1/64" os						
4CCB4	.1270	1/8	.1990	9/16	.1562	3/8
5CCB4	.1400	5/32	.2210	5/8	.1875	4/8
6CCB4	.1530	3/16	.2430	3/4	.2188	4 5/8
8CCB4	.1790	7/32	.2860	3/4	.2500	5
25CCB4	.2850	3/32	.3960	1	.3125	5 5/8
31CCB4	.3280	5/16	.4890	1	.3750	6 1/8
37CCB4	.3900	3/8	.5850	1 1/4	.5000	6 1/2
43CCB4	.4520	7/16	.6760	1 1/4	.5000	7
50CCB4	.5150	1/2	.7710	1 1/2	.5000	7 1/2
62CCB4	.6400	5/8	.9840	1 1/2	.6250	7 5/8
75CCB4	.7650	3/4	1.1720	1 5/8	.7500	7 3/4
87CCB4	.8910	7/8	1.3590	1 7/8	.8750	8
100CCB4	1.0150	1	1.5470	2	1.0000	8 1/2
10FCB4	.2050	1/4	.3280	7/8	.2812	5 1/4
Standard						
4CCB5	.1120	1/8	.1830	9/16	.1562	3/8
5CCB5	.1250	5/32	.2050	5/8	.1875	4/8
6CCB5	.1380	3/16	.2270	3/4	.2188	4 5/8
8CCB5	.1640	7/32	.2700	3/4	.2500	5
25CCB5	.2500	3/32	.3800	1	.3125	5 5/8
31CCB5	.3125	5/16	.4740	1	.3750	6 1/8
37CCB5	.3750	3/8	.5690	1 1/4	.5000	6 1/2
43CCB5	.4370	7/16	.6610	1 1/4	.5000	7
50CCB5	.5000	1/2	.7550	1 1/2	.5000	7 1/2
62CCB5	.6250	5/8	.9690	1 1/2	.6250	7 5/8
75CCB5	.7500	3/4	1.1560	1 5/8	.7500	7 3/4
87CCB5	.8750	7/8	1.3440	1 7/8	.8750	8
100CCB5	1.0000	1	1.5310	2	1.0000	8 1/2
10FCB5	.1900	1/4	.3120	7/8	.2812	5 1/4

**INTERCHANGEABLE PILOT COUNTERBORES**

HSS  
Counterbores



Straight shank.

No.	Shank Dia. In.	Finish Grind Shank Lgth. In.	Hole Dia. In.	Pilot Size Rge. In.	Flute Lgth. In.	OA Lgth. In.	No. Flutes
25RCBI	15/64	1 17/32	3/32	1/8-3/16	3/4	3 19/16	3
28RCBI	17/64	1 17/32	3/32	1/8-7/32	3/4	3 3/4	3
31RCBI	19/64	1 17/32	3/32	1/8-1/4	3/4	3 3/4	3
34RCBI	5/16	1 17/32	3/32	1/8-9/32	3/4	3 3/4	3
37RCBI	5/16	1 17/32	3/32	3/16-5/16	1	4 1/16	3
40RCBI	3/8	1 17/32	5/32	3/16-11/32	1	4 1/16	3
43RCBI	3/8	1 17/32	5/32	3/16-3/8	1	4 1/16	3
46RCBI	7/16	1 17/32	3/4	1/4-13/32	1 1/4	4 5/16	3
50RCBI	7/16	1 17/32	3/4	1/4-7/16	1 1/4	4 5/16	3
53RCBI	1/2	1 17/32	3/4	1/4-15/32	1 1/4	4 5/16	3
56RCBI	1/2	1 17/32	3/4	1/4-1/2	1 1/4	4 5/16	3
59RCBI	1/2	1 17/32	3/4	1/4-17/32	1 1/4	5 1/8	3
62RCBI	1/2	1 15/16	3/4	1/4-9/16	1 1/4	5 1/8	3
65RCBI	1/2	1 15/16	3/4	1/4-19/32	1 1/4	5 1/8	3
68RCBI	1/2	1 15/16	3/4	1/4-5/8	1 1/4	5 1/8	3
71RCBI	1/2	1 15/16	1/4	5/16-21/32	1 1/2	5 3/8	3
75RCBI	1/2	1 15/16	1/4	5/16-11/16	1 1/2	5 3/8	3
78RCBI	5/8	1 15/16	1/4	5/16-23/32	1 1/2	5 3/8	3
81RCBI	5/8	1 15/16	1/4	5/16-3/4	1 1/2	5 3/8	3
87RCBI	3/4	1 15/16	1/4	5/16-13/16	1 1/2	5 3/8	3
93RCBI	3/4	1 15/16	1/4	5/16-7/8	1 1/2	6 1/8	3
100RCBI	3/4	1 15/16	5/16	3/8-15/16	1 3/4	6 3/8	3
.....	3/4	2 5/16	5/16	3/8-1	1 3/4	6 3/8	3
.....	1	2 5/16	5/16	3/8-1 1/16	1 3/4	6 3/8	3
.....	1	2 5/16	5/16	3/8-1 1/8	1 3/4	6 3/8	3
.....	1	2 5/16	3/8	7/16-13/16	2	6 5/8	5
.....	1	2 5/16	3/8	7/16-15/16	2	6 5/8	5
.....	1 1/4	2 5/16	3/8	7/16-1 3/8	2	7 7/8	5

**COUNTERBORE & COUNTERSINK PILOTS**  
List P-200 - Spline Taper Drive



No.	Head Dia. In.	Shank Dia. In.	No.	Head Dia. In.	Shank Dia. In.
.....	3/32"	3/32"	31R25CBP	5/16"	1/4"
.....	3/32"	3/32"	37R25CBP	3/8"	1/4"
12R9CBP	1/8"	3/32"	43R25CBP	7/16"	1/4"
.....	3/32"	3/32"	.....	1/2"	1/4"
.....	5/32"	3/32"	56R25CBP	9/16"	1/4"
.....	3/32"	3/32"	62R25CBP	5/8"	1/4"
18R9CBP	3/16"	3/32"	.....	11/16"	1/4"
.....	3/32"	3/32"	75R25CBP	3/4"	1/4"
.....	3/32"	3/32"	.....	13/16"	1/4"
.....	3/32"	3/32"	.....	7/8"	1/4"
.....	7/32"	3/32"	.....	15/16"	1/4"
25R9CBP	1/4"	3/32"	.....	1	1/4"
.....	F	3/32"	.....	1	5/16"
.....	5/16"	3/32"	37R31CBP	3/8"	5/16"
.....	1/8"	3/32"	43R31CBP	7/16"	5/16"
.....	1/8"	3/32"	50R31CBP	1/2"	5/16"
.....	3/32"	3/32"	56R31CBP	9/16"	5/16"
.....	3/32"	3/32"	62R31CBP	5/8"	5/16"
.....	3/32"	3/32"	65R31CBP	21/32"	5/16"
.....	3/32"	3/32"	68R31CBP	11/16"	5/16"
.....	3/32"	3/32"	75R31CBP	3/4"	5/16"
.....	3/32"	3/32"	81R31CBP	13/16"	5/16"
.....	3/32"	3/32"	87R31CBP	7/8"	5/16"
.....	3/32"	3/32"	93R31CBP	15/16"	5/16"
.....	3/32"	3/32"	100R31CBP	1	5/16"
.....	3/32"	3/32"	.....	1 1/16"	5/16"
.....	3/32"	3/32"	.....	1 1/8"	5/16"
.....	1/8"	3/32"	43R37CBP	7/16"	3/8"
.....	1/8"	3/32"	.....	1/2"	3/8"
.....	1/8"	3/32"	56R37CBP	9/16"	3/8"
.....	1/8"	3/32"	.....	5/8"	3/8"
.....	1/8"	3/32"	.....	11/16"	3/8"
.....	1/8"	3/32"	.....	3/4"	3/8"
.....	1/8"	3/32"	.....	13/16"	3/8"
.....	1/8"	3/32"	.....	7/8"	3/8"
.....	1/8"	3/32"	.....	15/16"	3/8"
.....	1/8"	3/32"	.....	1	3/8"
.....	1/8"	3/32"	93R37CBP	15/16"	3/8"
.....	1/4"	3/8"	.....	1	3/8"

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No.	Head Dia.	Shank Dia.
.....	1 1/16"	3/8
.....	1 1/8"	3/8
.....	1 3/16"	3/8
.....	1 1/4"	3/8
<b>50R43CBP</b>	1/2"	7/16
.....	9/16"	7/16
.....	5/8"	7/16
.....	11/16"	7/16
<b>75R43CBP</b>	3/4"	7/16
.....	13/16"	7/16
.....	7/8"	7/16
.....	15/16"	7/16
.....	1	7/16
.....	1 1/16"	7/16
<b>112R43CBP</b>	1 1/8"	7/16
.....	1 3/16"	7/16
.....	1 1/4"	7/16
.....	1 5/16"	7/16
.....	9/16"	1/2
.....	5/8"	1/2
.....	11/16"	1/2
.....	3/4"	1/2
.....	13/16"	1/2
.....	7/8"	1/2
.....	15/16"	1/2
.....	1	1/2
.....	1 1/16"	1/2
<b>112R50CBP</b>	1 1/8"	1/2
.....	1 3/16"	1/2
.....	1 1/4"	1/2
.....	1 5/16"	1/2
<b>137C50CBP</b>	1 3/8"	1/2
.....	1 1/2"	1/2
.....	1 1/2"	1/2

**REAMERS**

**Cobalt - Information**



Jobbers Length Reamers. Available in high speed steel or cobalt and fractional, wire, letter, over and under plus decimal sizes. Straight shank. Production length.



Cobalt Chucking Reamers. Available in fractional, wire, letter, decimal, dowel pin and over and under sizes.

Complete Information Available on Request.

**SHELL REAMERS**

**Information**



Shell Reamer - Straight Flute



Shell Reamer - Left Hand Flute



Straight Shank Arbor



Taper Shank Arbor

High speed steel. Available with straight or left hand flute in fractional sizes and with straight or taper shank in arbors.

Complete Information Available on Request.

**BRUBAKER TOOL**

**Machine Screw Taps**  
List 102 - HSS - Ground Thread



Plug form furnished unless specified. Sets include taper, plug and bottom. 12/pkg.

No.	Size	Thrd. Form	H-Limit	No. Flutes
<b>Taper</b>				
/B10000	0-80	NF	H1	2
/B10008	1-64	NC	H1	2
/B10016	1-72	NF	H1	2
.....	2-56	NC	H1	3
/B10036	2-56	NC	H2	3
/B10044	2-64	NF	H2	3
/B10056	3-48	NC	H2	3
/B10060	3-56	NF	H2	3
.....	4-40	NC	H1	3
/B10076	4-40	NC	H2	3
/B10084	4-48	NF	H2	3
/B10088	4-36	NS	H2	3
/B10100	5-40	NC	H2	3
/B10108	5-44	NF	H2	3
.....	6-32	NC	H1	3
.....	6-32	NC	H2	3
/B10132	6-32	NC	H3	3
/B10148	6-40	NF	H2	3
.....	8-32	NC	H1	4
.....	8-32	NC	H2	4
/B10184	8-32	NC	H3	4
/B10200	8-36	NF	H2	4
.....	10-24	NC	H1	4
.....	10-24	NC	H2	4
/B10232	10-24	NC	H3	4
.....	10-32	NF	H1	4
.....	10-32	NF	H2	4
/B10276	10-32	NF	H3	4
/B10288	12-24	NC	H3	4
/B10296	12-28	NF	H3	4
<b>Plug</b>				
/B10001	0-80	NF	H1	2
.....	0-80	NF	H2	2
/B10009	1-64	NC	H1	2
.....	1-64	NC	H2	2
/B10017	1-72	NF	H1	2
.....	1-72	NF	H2	2
.....	2-56	NC	H1	3
/B10033	2-56	NC	H2	2
/B10037	2-56	NC	H2	3
/B10045	2-64	NF	H2	3
.....	3-48	NC	H1	3
/B10053	3-48	NC	H2	2
/B10057	3-48	NC	H2	3
/B10061	3-56	NF	H2	3
.....	4-40	NC	H1	2
.....	4-40	NC	H1	3
/B10073	4-40	NC	H2	2
/B10077	4-40	NC	H2	3
.....	4-48	NF	H1	3
/B10085	4-48	NF	H2	3
/B10089	4-36	NS	H2	3
.....	5-40	NC	H1	3
/B10097	5-40	NC	H2	2
/B10101	5-40	NC	H2	3
.....	5-44	NF	H2	3
/B10109	5-44	NF	H2	3
.....	6-32	NC	H1	2
.....	6-32	NC	H1	3
/B10121	6-32	NC	H2	2
.....	6-32	NC	H2	3
/B10133	6-32	NC	H3	2
.....	6-32	NC	H3	3
.....	6-32	NC	H7	3
.....	6-40	NF	H1	3
.....	6-40	NF	H2	2
/B10149	6-40	NF	H2	3
.....	8-32	NC	H1	2
.....	8-32	NC	H1	3

No.	Size	Thrd. Form	H-Limit	No. Flutes
.....	8-32	NC	H1	4
/B10165	8-32	NC	H2	2
.....	8-32	NC	H2	3
.....	8-32	NC	H2	4
.....	8-32	NC	H3	2
.....	8-32	NC	H3	3
/B10185	8-32	NC	H3	4
.....	8-32	NC	H7	3
.....	8-32	NC	H7	4
.....	8-36	NF	H1	4
/B10201	8-36	NF	H2	4
.....	10-24	NC	H1	3
.....	10-24	NC	H1	4
.....	10-24	NC	H2	2
.....	10-24	NC	H2	3
.....	10-24	NC	H2	4
/B10225	10-24	NC	H3	2
.....	10-24	NC	H3	3
/B10233	10-24	NC	H3	4
.....	10-24	NC	H7	3
.....	10-24	NC	H7	4
.....	10-32	NF	H1	2
.....	10-32	NF	H1	3
.....	10-32	NF	H1	4
.....	10-32	NF	H2	2
.....	10-32	NF	H2	3
.....	10-32	NF	H2	4
/B10269	10-32	NF	H3	2
.....	10-32	NF	H3	3
/B10277	10-32	NF	H3	4
.....	10-32	NF	H7	3
.....	10-32	NF	H7	4
/B10289	12-24	NC	H3	4
.....	12-28	NF	H1	4
/B10297	12-28	NF	H3	4
<b>Bottom</b>				
/B10002	0-80	NF	H1	2
.....	0-80	NF	H2	2
/B10010	1-64	NC	H1	2
/B10018	1-72	NF	H1	2
.....	1-72	NF	H2	2
.....	2-56	NC	H1	3
/B10034	2-56	NC	H2	2
/B10038	2-56	NC	H2	3
/B10046	2-64	NF	H2	3
/B10054	3-48	NC	H2	2
/B10058	3-48	NC	H2	3
/B10062	3-56	NF	H2	3
.....	4-40	NC	H1	3
/B10074	4-40	NC	H2	2
/B10078	4-40	NC	H2	3
/B10086	4-48	NF	H2	3
/B10090	4-36	NS	H2	3
.....	5-40	NC	H1	3
.....	5-40	NC	H2	2
/B10102	5-40	NC	H2	3
/B10110	5-44	NF	H2	3
.....	6-32	NC	H1	3
/B10122	6-32	NC	H2	2
.....	6-32	NC	H2	3
.....	6-32	NC	H3	2
/B10134	6-32	NC	H3	3
.....	6-32	NC	H7	3
/B10150	6-40	NF	H2	3
.....	8-32	NC	H1	3
.....	8-32	NC	H1	4
/B10166	8-32	NC	H2	2
.....	8-32	NC	H2	3
.....	8-32	NC	H2	4
.....	8-32	NC	H3	2
.....	8-32	NC	H3	3
/B10186	8-32	NC	H3	4
.....	8-32	NC	H7	3
.....	8-32	NC	H7	4
/B10202	8-36	NF	H2	4
.....	10-24	NC	H1	4
.....	10-24	NC	H2	2
.....	10-24	NC	H2	4
/B10226	10-24	NC	H3	2
.....	10-24	NC	H3	3

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No.	Size	Thrd. Form	H-Limit	No. Flutes	No.	Size	Thrd. Form	H-Limit	No. Flutes	No.	Size	Thrd. Form	H-Limit	No. Flutes
/B10234	10-24	NC	H3	4	/B10422	3/8-16	NC	H3	4	.....	1/2-13	NC	H2	4
.....	10-24	NC	H7	3	.....	3/8-24	NF	H1	4	/B10501	1/2-13	NC	H3	3
.....	10-24	NC	H7	4	/B10446	3/8-14	NF	H3	4	/B10505	1/2-13	NC	H3	4
.....	10-32	NF	H1	2	/B10465	7/16-14	NC	H3	4	.....	1/2-13	NC	H5	4
.....	10-32	NF	H1	4	/B10484	7/16-20	NF	H3	4	.....	1/2-20	NF	H1	4
.....	10-32	NF	H2	2	/B10504	1/2-13	NC	H3	4	.....	1/2-20	NF	H2	4
.....	10-32	NF	H2	3	.....	1/2-20	NF	H1	4	/B10521	1/2-20	NF	H3	3
.....	10-32	NF	H2	4	/B10523	1/2-20	NF	H3	4	/B10524	1/2-20	NF	H3	4
/B10270	10-32	NF	H3	2	/B10535	9/16-12	NC	H3	4	.....	1/2-20	NF	H5	4
.....	10-32	NF	H3	3	/B10546	9/16-18	NF	H3	4	.....	9/16-12	NC	H2	4
/B10278	10-32	NF	H3	4	/B10561	5/8-11	NC	H3	4	/B10536	9/16-12	NC	H3	4
.....	10-32	NF	H7	3	/B10577	5/8-18	NF	H3	4	.....	9/16-12	NC	H5	4
.....	10-32	NF	H7	4	/B10585	1 1/16-11	NS	H3	4	.....	9/16-18	NF	H2	4
/B10290	12-24	NC	H3	4	/B10589	1 1/16-16	NS	H3	4	/B10547	9/16-18	NF	H3	4
/B10298	12-28	NF	H3	4	/B10600	3/4-10	NC	H3	4	.....	9/16-18	NF	H5	4
<b>Set</b>					.....	3/4-16	NF	H3	4	.....	9/16-11	NC	H1	4
/B10003	0-80	NF	H1	2	/B10626	7/8-9	NC	H4	4	.....	5/8-11	NC	H2	4
/B10011	1-64	NC	H1	2	/B10636	7/8-14	NF	H4	4	/B10562	5/8-11	NC	H3	4
/B10019	1-72	NF	H1	2	/B10646	1-8	NC	H4	4	.....	5/8-11	NC	H5	4
.....	2-56	NC	H1	3	/B10653	1-12	NF	H4	4	.....	5/8-18	NF	H1	4
/B10039	2-56	NC	H2	3	/B10660	1-14	NS	H4	4	.....	5/8-18	NF	H2	4
/B10047	2-64	NF	H2	3	.....	1-14	NS	H6	4	/B10578	5/8-18	NF	H3	4
/B10059	3-48	NC	H2	3	/B10668	1 1/8-7	NC	H4	4	.....	5/8-18	NF	H5	4
/B10063	3-56	NF	H2	3	/B10672	1 1/8-12	NF	H4	4	.....	5/8-18	NF	H5	4
.....	4-40	NC	H1	3	/B10676	1 1/4-7	NC	H4	4	/B10586	1 1/16-11	NS	H3	4
/B10079	4-40	NC	H2	3	/B10680	1 1/4-12	NF	H4	6	/B10590	1 1/16-16	NS	H3	4
/B10087	4-48	NF	H2	3	/B10684	1 3/8-6	NC	H4	4	.....	3/4-10	NC	H1	4
.....	4-36	NS	H2	3	/B10688	1 3/8-12	NF	H4	6	.....	3/4-10	NC	H2	4
/B10103	5-40	NC	H2	3	/B10692	1 1/2-6	NC	H4	4	/B10601	3/4-10	NC	H3	4
/B10111	5-44	NF	H2	3	.....	1 1/2-12	NF	H4	6	.....	3/4-10	NC	H5	4
.....	6-32	NC	H1	3	<b>Plug</b>					.....	3/4-16	NF	H1	4
.....	6-32	NC	H2	3	.....	1/4-20	NC	H1	3	/B10616	3/4-16	NF	H2	4
/B10135	6-32	NC	H3	3	.....	1/4-20	NC	H1	4	.....	3/4-16	NF	H3	4
/B10151	6-40	NF	H2	3	.....	1/4-20	NC	H2	3	.....	7/8-9	NC	H2	4
.....	8-32	NC	H1	4	.....	1/4-20	NC	H2	4	/B10627	7/8-9	NC	H4	4
.....	8-32	NC	H2	4	/B10316	1/4-20	NC	H3	2	.....	7/8-9	NC	H6	4
/B10187	8-32	NC	H3	4	/B10320	1/4-20	NC	H3	3	.....	7/8-14	NF	H2	4
/B10203	8-36	NF	H2	4	/B10324	1/4-20	NC	H3	4	/B10637	7/8-14	NF	H4	4
.....	10-24	NC	H1	4	.....	1/4-20	NC	H5	3	.....	7/8-14	NF	H6	4
.....	10-24	NC	H2	4	.....	1/4-20	NC	H5	4	.....	1-8	NC	H2	4
/B10235	10-24	NC	H3	4	.....	1/4-28	NF	H1	4	/B10647	1-8	NC	H4	4
.....	10-32	NF	H4	4	.....	1/4-28	NF	H2	4	.....	1-8	NC	H6	4
.....	10-32	NF	H2	4	/B10344	1/4-28	NF	H3	2	/B10654	1-12	NF	H4	4
/B10279	10-32	NF	H3	4	.....	1/4-28	NF	H3	3	.....	1-14	NS	H2	4
/B10291	12-24	NC	H3	4	/B10352	1/4-28	NF	H3	4	/B10661	1-14	NS	H4	4
/B10299	12-28	NF	H3	4	.....	1/4-28	NF	H4	4	.....	1-14	NS	H6	4
<b>BRUBAKER TOOL</b>					.....	5/16-18	NC	H1	4	/B10669	1 1/8-7	NC	H4	4
<b>Hand Taps</b>					.....	5/16-18	NC	H2	4	/B10673	1 1/8-12	NF	H4	4
List 106 - HSS - Ground Thread					/B10368	5/16-18	NC	H3	2	/B10677	1 1/4-7	NC	H4	4
					/B10372	5/16-18	NC	H3	3	/B10681	1 1/4-12	NF	H4	6
Taps. American National thread form taps available in taper, plug and bottoming. Plug form furnished unless specified.					/B10376	5/16-18	NC	H3	4	/B10685	1 3/8-6	NC	H4	4
<b>Taps</b>					.....	5/16-18	NC	H5	3	/B10689	1 3/8-12	NF	H4	6
No.	Size	Thrd. Form	H-Limit	No. Flutes	.....	5/16-18	NC	H5	4	/B10693	1 1/2-6	NC	H4	4
.....	1/4-20	NC	H1	4	.....	5/16-24	NF	H1	4	/B10697	1 1/2-12	NF	H4	6
.....	1/4-20	NC	H2	4	.....	5/16-24	NF	H2	4	<b>Bottom</b>				
/B10323	1/4-20	NC	H3	4	.....	5/16-24	NF	H3	3	.....	1/4-20	NC	H1	4
/B10351	1/4-28	NF	H3	4	/B10400	5/16-24	NF	H3	4	.....	1/4-20	NC	H2	4
.....	5/16-18	NC	H1	4	.....	5/16-24	NF	H4	4	/B10317	1/4-20	NC	H3	2
.....	5/16-18	NC	H2	4	.....	3/8-16	NC	H1	3	.....	1/4-20	NC	H3	3
/B10375	5/16-18	NC	H3	4	.....	3/8-16	NC	H1	4	/B10325	1/4-20	NC	H3	4
.....	5/16-24	NF	H1	4	.....	3/8-16	NC	H3	3	.....	1/4-20	NC	H5	3
/B10399	5/16-24	NF	H3	4	/B10423	3/8-16	NC	H3	4	.....	1/4-20	NC	H5	4
.....	3/8-16	NC	H2	4	.....	3/8-16	NC	H5	3	.....	1/4-28	NF	H1	4
.....					.....	3/8-16	NC	H5	4	.....	1/4-28	NF	H2	4
.....					.....	3/8-24	NF	H1	4	/B10345	1/4-28	NF	H3	2
.....					.....	3/8-24	NF	H2	4	/B10349	1/4-28	NF	H3	3
.....					/B10447	3/8-24	NF	H3	3	/B10353	1/4-28	NF	H3	4
.....					.....	3/8-24	NF	H4	4	.....	1/4-28	NF	H4	4
.....					.....	7/16-14	NC	H1	4	.....	5/16-18	NC	H1	4
.....					.....	7/16-14	NC	H2	4	.....	5/16-18	NC	H2	4
.....					/B10463	7/16-14	NC	H3	3	/B10369	5/16-18	NC	H3	2
.....					/B10466	7/16-14	NC	H3	4	/B10373	5/16-18	NC	H3	3
.....					.....	7/16-14	NC	H5	4	/B10377	5/16-18	NC	H3	4
.....					.....	7/16-20	NF	H1	4	.....	5/16-18	NC	H5	3
.....					.....	7/16-20	NF	H2	4	.....	5/16-18	NC	H5	4
.....					.....	7/16-20	NF	H3	3	.....	5/16-24	NF	H1	4
.....					/B10485	7/16-20	NF	H3	4	.....	5/16-24	NF	H2	4
.....					.....	7/16-20	NF	H5	4	/B10397	5/16-24	NF	H3	3
.....					.....	1/2-13	NC	H1	4	/B10401	5/16-24	NF	H3	4
.....					.....					.....	5/16-24	NF	H4	4

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No.	Size	Thrd. Form	H-Limit	No. Flutes
.....	3/8-16	NC	H1	4
.....	3/8-16	NC	H2	4
.....	3/8-16	NC	H3	3
/B10424	3/8-16	NC	H3	4
.....	3/8-16	NC	H5	3
.....	3/8-16	NC	H5	4
.....	3/8-24	NF	H1	4
.....	3/8-24	NF	H2	4
.....	3/8-24	NF	H3	3
/B10448	3/8-24	NF	H3	4
.....	3/8-24	NF	H4	4
.....	7/16-14	NC	H1	4
.....	7/16-14	NC	H2	4
/B10467	7/16-14	NC	H3	4
.....	7/16-14	NC	H5	4
.....	7/16-20	NF	H1	4
.....	7/16-20	NF	H2	4
/B10486	7/16-20	NF	H3	4
.....	7/16-20	NF	H5	4
.....	1/2-13	NC	H1	4
.....	1/2-13	NC	H2	4
/B10502	1/2-13	NC	H3	3
/B10506	1/2-13	NC	H3	4
.....	1/2-13	NC	H5	4
.....	1/2-20	NF	H1	4
.....	1/2-20	NF	H2	4
/B10525	1/2-20	NF	H3	4
.....	1/2-20	NF	H5	4
/B10537	9/16-12	NC	H3	4
.....	9/16-12	NC	H5	4
/B10548	9/16-18	NF	H3	4
.....	9/16-18	NF	H5	4
/B10563	5/8-11	NC	H3	4
.....	5/8-11	NC	H5	4
.....	5/8-18	NF	H2	4
/B10579	5/8-18	NF	H3	4
.....	5/8-18	NF	H5	4
/B10587	1 1/16-11	NS	H3	4
/B10591	1 1/16-16	NS	H3	4
/B10602	3/4-10	NC	H3	4
.....	3/4-10	NC	H5	4
/B10617	3/4-16	NF	H3	4
.....	3/4-16	NF	H5	4
/B10628	7/8-9	NC	H4	4
/B10638	7/8-14	NF	H4	4
/B10648	1-8	NC	H4	4
/B10655	1-12	NF	H4	4
/B10662	1-14	NS	H4	4
.....	1-14	NS	H6	4
/B10670	1 1/8-7	NC	H4	4
/B10674	1 1/8-12	NF	H4	4
/B10678	1 1/4-7	NC	H4	4
/B10682	1 1/4-12	NF	H4	6
/B10686	1 3/8-6	NC	H4	4
/B10690	1 3/8-12	NF	H4	6
/B10694	1 1/2-6	NC	H4	4
/B10698	1 1/2-12	NF	H4	6

Tap Sets. Include taper, plug and bottom.

Tap Sets				
No.	Size	Thrd. Form	H-Limit	No. Flutes
.....	1/4-20	NC	H1	4
.....	1/4-20	NC	H2	4
/B10326	1/4-20	NC	H3	4
/B10354	1/4-28	NF	H3	4
.....	5/16-18	NC	H2	4
/B10378	5/16-18	NC	H3	4
/B10402	5/16-24	NF	H3	4
.....	3/8-16	NC	H2	4
/B10425	3/8-16	NC	H3	4
/B10449	3/8-24	NF	H3	4
/B10468	7/16-14	NC	H3	4
/B10487	7/16-20	NF	H3	4
/B10507	1/2-13	NC	H3	4
/B10526	1/2-20	NF	H3	4
/B10538	9/16-12	NC	H3	4
/B10549	9/16-18	NF	H3	4
/B10564	5/8-11	NC	H3	4

No.	Size	Thrd. Form	H-Limit	No. Flutes
/B10580	5/8-18	NF	H3	4
/B10588	1 1/16-11	NS	H3	4
/B10592	1 1/16-16	NS	H3	4
/B10603	3/4-10	NC	H3	4
/B10618	3/4-16	NF	H3	4
/B10629	7/8-9	NC	H4	4
/B10639	7/8-14	NF	H4	4
/B10649	1-8	NC	H4	4
/B10656	1-12	NF	H4	4
/B10663	1-14	NS	H4	4
/B10671	1 1/8-7	NC	H4	4
/B10675	1 1/8-12	NF	H4	4
/B10679	1 1/4-7	NC	H4	4
/B10683	1 1/4-12	NF	H4	6
/B10687	1 3/8-6	NC	H4	4
/B10691	1 3/8-12	NF	H4	6
/B10695	1 1/2-6	NC	H4	4
/B10699	1 1/2-12	NF	H4	6

**BRUBAKER TOOL**

**Hand Taps**

List 108 - Series Eight Pitch - Ground Thread - HSS



Plug chamfer style, 3 threads to 5 threads. American National thread form. During use chips retained in flutes. For most materials. Use in through or blind holes.

No.	Size	Thrd. Form	H-Limit	No. Flutes
<b>Taper</b>				
.....	1 1/8-8	N	H5	4
.....	1 1/4-8	N	H5	4
.....	1 3/8-8	N	H5	4
.....	1 1/2-8	N	H5	6
.....	1 5/8-8	N	H6	6
.....	1 3/4-8	N	H6	6
.....	1 7/8-8	N	H6	6
.....	2-8	N	H6	6
.....	2 1/4-8	N	H6	6
.....	2 1/2-8	N	H6	6
<b>Plug</b>				
/B10801	1 1/8-8	N	H5	4
/B10805	1 1/4-8	N	H5	4
/B10809	1 3/8-8	N	H5	4
/B10813	1 1/2-8	N	H5	6
/B10817	1 5/8-8	N	H6	6
/B10821	1 3/4-8	N	H6	6
/B10825	1 7/8-8	N	H6	6
/B10829	2-8	N	H6	6
/B10833	2 1/4-8	N	H6	6
/B10837	2 1/2-8	N	H6	6

**Bottom**

.....	1 1/8-8	N	H5	4
.....	1 1/4-8	N	H5	4
.....	1 3/8-8	N	H5	4
.....	1 1/2-8	N	H5	6
.....	1 5/8-8	N	H6	6
.....	1 3/4-8	N	H6	6
.....	1 7/8-8	N	H6	6
.....	2-8	N	H6	6
.....	2 1/4-8	N	H6	6
.....	2 1/2-8	N	H6	6

**BRUBAKER TOOL**

**Spiral Pointed Taps**

List 110 - HSS - Ground Thread - Plug



American National thread form taps. Taps to and including 3/8" have same size shanks, other shanks are smaller than root diameter of thread.

No.	Size	Thrd. Form	H-Limit	No. Flutes
.....	0-80	NF	H1	2
.....	0-80	NF	H2	2
/B11001	1-64	NC	H1	2
.....	1-64	NC	H2	2
/B11003	1-72	NF	H1	2
.....	1-72	NF	H2	2
/B11005	1-72	NF	H2	2
.....	2-56	NC	H1	2
.....	2-56	NC	H2	2
/B11007	2-64	NF	H1	2
.....	2-64	NF	H2	2
/B11009	2-64	NF	H2	2
.....	3-48	NC	H1	2
/B11011	3-48	NC	H2	2
.....	3-56	NF	H1	2
.....	3-56	NF	H2	2
/B11013	3-56	NF	H2	2
.....	4-40	NC	H1	2
/B11015	4-40	NC	H2	2
.....	4-48	NF	H1	2
/B11017	4-48	NF	H2	2
/B11018	4-36	NS	H2	2
.....	5-40	NC	H1	2
/B11020	5-40	NC	H2	2
/B11021	5-44	NF	H2	2
.....	6-32	NC	H1	2
.....	6-32	NC	H2	2
/B11024	6-32	NC	H3	2
.....	6-32	NC	H7	2
.....	6-40	NF	H1	2
/B11027	6-40	NF	H2	2
.....	8-32	NC	H1	2
.....	8-32	NC	H2	2
/B11030	8-32	NC	H3	2
.....	8-32	NC	H7	2
.....	8-36	NF	H1	2
/B11033	8-36	NF	H2	2
.....	10-24	NC	H1	2
.....	10-24	NC	H2	2
/B11036	10-24	NC	H3	2
.....	10-24	NC	H7	2
.....	10-32	NF	H1	2
.....	10-32	NF	H2	2
/B11040	10-32	NF	H3	2
.....	10-32	NF	H7	2
.....	12-24	NC	H1	2
/B11043	12-24	NC	H3	2
/B11044	12-28	NF	H3	2
.....	1/4-20	NC	H1	2
.....	1/4-20	NC	H2	2
/B11047	1/4-20	NC	H3	2
/B11048	1/4-20	NC	H3	3
.....	1/4-20	NC	H5	2
.....	1/4-20	NC	H5	3
.....	1/4-28	NF	H1	2
.....	1/4-28	NF	H2	2
.....	1/4-28	NF	H2	3
/B11054	1/4-28	NF	H3	2
.....	1/4-28	NF	H4	2
/B11056	1/4-28	NF	H4	3
.....	5/16-18	NC	H1	2
.....	5/16-18	NC	H2	2
/B11059	5/16-18	NC	H3	2
/B11060	5/16-18	NC	H3	3
.....	5/16-18	NC	H5	2
.....	5/16-18	NC	H5	3
.....	5/16-24	NF	H1	2
.....	5/16-24	NF	H2	2
.....	5/16-24	NF	H2	3
/B11066	5/16-24	NF	H3	2
.....	5/16-24	NF	H4	2
.....	5/16-24	NF	H4	3
.....	3/8-16	NC	H1	3
.....	3/8-16	NC	H2	3
/B11071	3/8-16	NC	H3	3
.....	3/8-16	NC	H5	3
.....	3/8-24	NF	H1	3
.....	3/8-24	NF	H2	3
/B11075	3/8-24	NF	H3	3
.....	3/8-24	NF	H4	3
.....	7/16-14	NC	H2	3
/B11078	7/16-14	NC	H3	3
.....	7/16-14	NC	H5	3
.....	7/16-20	NF	H2	3

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No.	Size	Thrd. Form	H-Limit	No. Flutes
/B11081	7/16-20	NF	H3	3
.....	7/16-20	NF	H5	3
.....	1/2-13	NC	H1	3
.....	1/2-13	NC	H2	3
/B11085	1/2-13	NC	H3	3
.....	1/2-13	NC	H5	3
.....	1/2-20	NF	H1	3
.....	1/2-20	NF	H2	3
/B11089	1/2-20	NF	H3	3
.....	1/2-20	NF	H5	3
/B11091	9/16-12	NC	H3	3
/B11092	9/16-18	NF	H3	3
/B11093	5/8-11	NC	H3	3
.....	5/8-11	NC	H5	3
/B11095	5/8-18	NF	H3	3
/B11096	3/4-10	NC	H3	3
.....	3/4-10	NC	H5	3
/B11098	3/4-16	NF	H3	3

**BRUBAKER TOOL**

**Spiral Pointed Taps**

List 114 - Fluteless - Ground Thread - HSS



Plug chamfer style, 3 threads to 5 threads. American National thread form. For tapping short through holes under high torque conditions and for tapping 2 legs of U-shaped parts.

Spiral point forces chips ahead to prevent clogging and recutting of chips.

No.	Size	Thrd. Form	H-Limit	No. Gashes
.....	4-40	NC	H2	2
.....	5-40	NC	H2	2
.....	6-32	NC	H3	2
.....	8-32	NC	H3	2
.....	10-24	NC	H3	2
.....	10-32	NF	H3	2
.....	12-24	NC	H3	2
.....	1/4-20	NC	H3	2
.....	5/16-18	NC	H3	2
.....	3/8-16	NC	H3	3
.....	1/2-13	NC	H3	3

**BRUBAKER TOOL**

**Spiral Fluted Taps**

List 118 - 30° Helix - Ground Thread - HSS



American National thread form. Designed for tapping blind holes. Plug furnished unless other chamfer style specified.

**Plug Style.** 3 threads to 5 threads.

**Bottoming Style.** 1 thread to 2 threads.

No.	Size	Thrd. Form	H-Limit	No. Flutes
.....	4-40	NC	H2	2
.....	5-40	NC	H2	2
/B11814	6-32	NC	H2	2
/B11822	8-32	NC	H2	2
/B11826	10-24	NC	H2	2
/B11830	10-32	NF	H2	2
/B11838	1/4-20	NC	H2	2
/B11842	1/4-28	NF	H2	2
/B11846	5/16-18	NC	H3	3
/B11850	5/16-24	NF	H3	3
/B11854	3/8-16	NC	H3	3
/B11858	3/8-24	NF	H3	3
/B11862	7/16-14	NC	H3	3
/B11866	7/16-20	NF	H3	3

No.	Size	Thrd. Form	H-Limit	No. Flutes
/B11870	1/2-13	NC	H3	3
/B11874	1/2-20	NF	H3	3
<b>Bottom</b>				
.....	4-40	NC	H2	2
.....	5-40	NC	H2	2
.....	6-32	NC	H2	2
.....	8-32	NC	H2	2
.....	10-24	NC	H2	2
.....	10-32	NF	H2	2
.....	1/4-20	NC	H2	2
.....	1/4-28	NF	H2	2
.....	5/16-18	NC	H3	3
.....	5/16-24	NF	H3	3
.....	3/8-16	NC	H3	3
.....	3/8-24	NF	H3	3
.....	7/16-14	NC	H3	3
.....	7/16-20	NF	H3	3
.....	1/2-13	NC	H3	3
.....	1/2-20	NF	H3	3

**BRUBAKER TOOL**

**Hand & Machine Screw Taps**

List 120 - Spiral Fluted - HSS



American National thread form. Recommended for blind holes with chip removal problems and on intermittent cuts such as slots, keyways, etc.

No.	Size	Thrd. Form	H-Limit	Flutes
<b>Plug</b>				
.....	3-48	NC	H2	2
.....	4-40	NC	H2	2
.....	5-40	NC	H2	2
.....	6-32	NC	H2	2
.....	6-32	NC	H3	2
.....	6-40	NF	H2	2
.....	6-32	NC	H3	2
.....	6-40	NF	H2	2
.....	8-32	NC	H2	3
.....	8-32	NC	H3	3
.....	10-24	NC	H3	3
.....	10-32	NF	H3	3
.....	12-24	NC	H3	3
.....	1/4-20	NC	H3	3
.....	1/4-28	NF	H3	3
.....	5/16-18	NC	H3	3
.....	5/16-24	NF	H3	3
.....	3/8-16	NC	H3	3
.....	3/8-24	NF	H3	3
.....	7/16-14	NC	H3	3
.....	7/16-20	NF	H3	3
.....	1/2-13	NC	H3	3
.....	1/2-20	NF	H3	3
<b>Bottom</b>				
.....	3-48	NC	H2	2
.....	4-40	NC	H2	2
.....	5-40	NC	H2	2
.....	6-32	NC	H2	2
.....	6-32	NC	H3	2
.....	8-32	NC	H2	3
.....	8-32	NC	H3	3
.....	10-24	NC	H3	3
.....	10-32	NF	H3	3
.....	12-24	NC	H3	3
.....	1/4-20	NC	H3	3
.....	1/4-28	NF	H3	3
.....	5/16-18	NC	H3	3
.....	5/16-24	NF	H3	3
.....	3/8-16	NC	H3	3
.....	3/8-24	NF	H3	3
.....	7/16-14	NC	H3	3
.....	7/16-20	NF	H3	3
.....	1/2-13	NC	H3	3
.....	1/2-20	NF	H3	3

**BRUBAKER TOOL**

**Thread Forming Taps**

List 124 - True Lead - HSS



Cold form threads displacing materials from major dia. toward minor dia. Effective in ductile materials such as aluminum, copper, brass, leaded steels, low carbon steels, stainless steel. American National thread form. Must be run under power usually at speeds of 150% to 200% in excess of cutting taps. Require larger tap drills than cutting taps.

**Plug Point Style.** 3" to 5" Threads.

**Bottoming Point Style.** 1" to 2 1/2" Threads.

No.	Size	Thrd. Form	H-Limit
<b>Plug Point Style</b>			
.....	0-80	NF	H2
.....	0-80	NF	H3
.....	2-56	NC	H2
.....	2-56	NC	H3
.....	4-40	NC	H3
.....	4-40	NC	H5
.....	4-48	NF	H3
.....	4-48	NF	H5
.....	5-40	NC	H3
.....	5-40	NC	H5
.....	5-44	NF	H3
.....	5-44	NF	H5
.....	6-32	NC	H3
.....	6-32	NC	H5
.....	6-32	NC	H7
.....	6-40	NF	H3
.....	6-40	NF	H5
.....	8-32	NC	H3
.....	8-32	NC	H5
.....	8-32	NC	H7
.....	8-36	NF	H3
.....	10-24	NC	H4
.....	10-24	NC	H6
.....	10-32	NC	H4
.....	10-32	NF	H6
.....	12-24	NC	H4
.....	12-24	NC	H6
.....	12-28	NF	H4
.....	1/4-20	NC	H3
.....	1/4-20	NC	H4
.....	1/4-20	NC	H6
.....	1/4-28	NF	H4
.....	1/4-28	NF	H6
.....	5/16-18	NC	H5
.....	5/16-18	NC	H7
.....	5/16-24	NF	H5
.....	5/16-24	NF	H7
.....	3/8-16	NC	H5
.....	3/8-16	NC	H7
.....	3/8-24	NF	H5
.....	3/8-24	NF	H7
.....	7/16-14	NC	H5
.....	7/16-14	NC	H8
.....	7/16-20	NF	H5
.....	7/16-20	NF	H8
.....	1/2-13	NC	H8
.....	1/2-13	NC	H5
.....	1/2-20	NF	H5
.....	1/2-20	NF	H8
.....	9/16-12	NC	H7
.....	9/16-12	NC	H10
.....	9/16-18	NF	H7
.....	9/16-18	NF	H10
.....	5/8-11	NC	H7
.....	5/8-11	NC	H10
.....	5/8-18	NF	H7

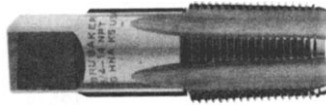
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No.	Size	Thrd. Form	H-Limit
.....	5/8-18	NF	H10
.....	3/4-10	NC	H7
.....	3/4-10	NC	H10
.....	3/4-16	NF	H7
.....	3/4-16	NF	H10
<b>Bottom Point Style</b>			
.....	0-80	NF	H2
.....	0-80	NF	H3
.....	1-64	NC	H2
.....	1-72	NF	H2
.....	2-56	NC	H2
.....	2-56	NC	H3
.....	2-64	NF	H2
.....	2-64	NF	H3
.....	3-48	NC	H2
.....	3-48	NC	H3
.....	3-56	NF	H2
.....	3-56	NF	H3
.....	4-40	NC	H3
.....	4-40	NC	H5
.....	4-48	NF	H3
.....	4-48	NF	H5
.....	5-40	NC	H3
.....	5-40	NC	H5
.....	5-44	NF	H3
.....	5-44	NF	H5
.....	6-32	NC	H3
.....	6-32	NC	H5
.....	6-32	NC	H7
.....	6-40	NF	H3
.....	6-40	NF	H5
.....	8-32	NC	H3
.....	8-32	NC	H5
.....	8-32	NC	H7
.....	8-36	NF	H3
.....	10-24	NC	H4
.....	10-24	NC	H6
.....	10-32	NC	H4
.....	10-32	NF	H6
.....	12-24	NC	H4
.....	12-24	NC	H6
.....	12-28	NF	H4
.....	1/4-20	NC	H3
.....	1/4-20	NC	H4
.....	1/4-20	NC	H6
.....	1/4-28	NF	H4
.....	1/4-28	NF	H6
.....	5/16-18	NC	H5
.....	5/16-18	NC	H7
.....	5/16-24	NF	H5
.....	5/16-24	NF	H7
.....	3/8-16	NC	H5
.....	3/8-16	NC	H7
.....	3/8-24	NF	H5
.....	3/8-24	NF	H7
.....	7/16-14	NC	H5
.....	7/16-14	NC	H8
.....	7/16-20	NF	H5
.....	7/16-20	NF	H8
.....	1/2-13	NC	H5
.....	1/2-13	NC	H8
.....	1/2-20	NF	H5
.....	1/2-20	NF	H8
.....	9/16-12	NC	H7
.....	9/16-12	NC	H10
.....	9/16-18	NF	H7
.....	9/16-18	NF	H10
.....	5/8-11	NC	H7
.....	5/8-11	NC	H10
.....	5/8-18	NF	H7
.....	5/8-18	NF	H10
.....	3/4-10	NC	H7
.....	3/4-10	NC	H10
.....	3/4-16	NF	H7
.....	3/4-16	NF	H10

**BRUBAKER TOOL**

**Taper Pipe Taps**  
HSS - Ground Thread



American Standard thread form. Large shank 1/8" taps will be provided unless otherwise specified.

**List 134 - Regular**

No.	Size	Thrd. Form	No. Flutes
.....	1/16-27	NPT	4
.....	1/8-27	NPT	4
.....	1/8-27	NPT	4
.....	1/4-18	NPT	4
.....	3/8-18	NPT	4
.....	1/2-14	NPT	4
.....	3/4-14	NPT	5
.....	1-11 1/2	NPT	5
.....	1 1/4-11 1/2	NPT	5
.....	1 1/2-11 1/2	NPT	7
.....	2-11 1/2	NPT	7

**List 136 - Regular Interrupted**

No.	Size	Thrd. Form	No. Flutes
.....	1/8-27	NPT	5
.....	1/8-27*	NPT	5
.....	1/4-18	NPT	5
.....	3/8-18	NPT	5
.....	1/2-14	NPT	5
.....	3/4-14	NPT	5
.....	1-11 1/2	NPT	5
.....	1 1/4-11 1/2	NPT	5
.....	1 1/2-11 1/2	NPT	7
.....	2-11 1/2	NPT	7

\*Small shank.

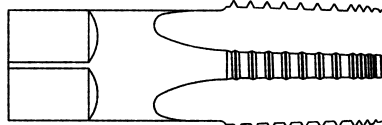
**List 138 - Dryseal**

No.	Size	Thrd. Form	No. Flutes
/B13800	1/16-27	NPTF	4
/B13802	1/8-27	NPTF	4
/B13804	1/8-27	NPTF	4
/B13806	1/4-18	NPTF	4
/B13808	3/8-18	NPTF	4
/B13810	1/2-14	NPTF	4
/B13812	3/4-14	NPTF	5
/B13814	1-11 1/2	NPTF	5
/B13816	1 1/4-11 1/2	NPTF	5
/B13818	1 1/2-11 1/2	NPTF	7
/B13820	2-11 1/2	NPTF	7

**BRUBAKER TOOL**

**Taper Pipe Taps**

**List 140 - Interrupted Thread - HSS**



Provide additional chip space, better coolant flow. Reduce drag. Suitable for tapping most materials. Chips retained in flutes during use. Assembly of NPTF threads does not require sealants. Seal attained by metal-to-metal contact. Nominal tap size is based upon the fitting size, not actual size of the tap.

Taper pipe, dryseal. High speed steel. Standard chamfer 2 to 3 1/2" threads. Unless otherwise specified, orders for 1/8" pipe taps will be filled with taps having large shank.

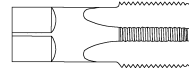
No.	Size In.	No. Flutes
.....	1/8-27	5
.....	1/8-27*	5
.....	1/4-18	5
.....	3/8-18	5
.....	1/2-14	5
.....	3/4-14	5
.....	1-11 1/2	5
.....	1 1/4-11 1/2	5
.....	1 1/2-11 1/2	7
.....	2-11 1/2	7

\*Small shank.

**BRUBAKER TOOL**

**Straight Pipe Taps**

**List 150 - Ground Thread - HSS**



Regular. Plug chamfer style, 3 threads to 5 threads. American Standard thread form.

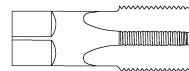
For low pressure applications. For most materials. During use chips retained in flutes. Require Teflon® tape, pipe joint compound or other sealant. Nominal tap size based on fitting size rather than actual tap size.

No.	Size	Thrd. Form	No. Flutes
.....	1/8-27	NPS	4
.....	1/4-18	NPS	4
.....	3/8-18	NPS	4
.....	1/2-14	NPS	4
.....	3/4-14	NPS	5
.....	1-11 1/2	NPS	5

**BRUBAKER TOOL**

**Straight Pipe Taps**

**List 152 - Dryseal - HSS**



Plug chamfer style, 3 threads to 5 threads. American National thread form. For low

pressure applications. For most materials. During use chips retained in flute. Seal formed by metal-to-metal contact. Nominal tap size based on fitting size rather than actual tap size.

No.	No.	Thrd. Size	Thrd. Form	No. Flutes
15202	/B15202	1/8-27	NPSF	4
15206	/B15206	1/4-18	NPSF	4
15208	/B15208	3/8-18	NPSF	4
15210	/B15210	1/2-14	NPSF	4
15212	/B15212	3/4-14	NPSF	5
15214	.....	1-11 1/2	NPSF	5

**NUT TAPS**

**List 111A**

**Fractional Sizes**



No.	Size	Thrd. Form	H-Limit	No. Flutes	OA Lgth. In.
<b>Taper</b>					
.....	1/4-20	NC	H-3	4	5
.....	1/4-28	NF	H-3	4	5
.....	5/16-18	NC	H-3	4	5 1/2
.....	5/16-24	NF	H-3	4	5 1/2
.....	3/8-16	NC	H-3	4	6

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No.	Size	Thrd. Form	H-Limit	No. Flutes	OA Lgth. In.
.....	3/8-24	NF	H-3	4	6
.....	7/16-14	NC	H-3	4	6 1/2
.....	7/16-20	NF	H-3	4	6 1/2
.....	1/2-13	NC	H-3	4	7
.....	1/2-20	NF	H-3	4	7
.....	5/8-11	NC	H-3	4	8
.....	5/8-18	NF	H-3	4	8
.....	3/4-10	NC	H-3	4	9
.....	3/4-16	NF	H-3	4	9
.....	7/8-9	NC	H-4	4	10
.....	7/8-14	NF	H-4	4	10
.....	1-8	NC	H-4	4	11
.....	1-14	NF	H-4	4	11
<b>Plug</b>					
/R42532I	1/4-20	NC	H-3	4	5
.....	1/4-28	NF	H-3	4	5
/R42732I	5/16-18	NC	H-3	4	5 1/2
.....	5/16-24	NF	H-3	4	5 1/2
/R42932	3/8-16	NC	H-3	4	6
.....	3/8-24	NF	H-3	4	6
/R43132	7/16-14	NC	H-3	4	6 1/2
.....	7/16-20	NF	H-3	4	6 1/2
/R43332	1/2-13	NC	H-3	4	7
/R43432I	1/2-20	NF	H-3	4	7
/R43532	5/8-11	NC	H-3	4	8
.....	5/8-18	NF	H-3	4	8
/R43732	3/4-10	NC	H-3	4	9
.....	3/4-16	NF	H-3	4	9
/R43942	7/8-9	NC	H-4	4	10
.....	7/8-14	NF	H-4	4	10
/R44142	1-8	NC	H-4	4	11
.....	1-14	NF	H-4	4	11

**PULLEY PLUG TAPS**  
 List 112C - Fractional Sizes



Coarse thread. Four flutes. Plug style.

No.	Tap Size	Shank Dia. In.	OA Lgth. In.
/R45032	1/4-20	.255	6
.....	1/4-20	.255	8
/R45132	5/16-18	.318	6
.....	5/16-18	.318	8
/R45232	3/8-16	.381	6
.....	3/8-16	.381	8
.....	3/8-16	.381	10
/R45332	7/16-14	.444	6
.....	7/16-14	.444	8
.....	7/16-14	.444	10
.....	7/16-14	.444	12
/R45432	1/2-13	.507	6
.....	1/2-13	.507	8
.....	1/2-13	.507	10
.....	1/2-13	.507	12
/R45532	5/8-11	.633	6
.....	5/8-11	.633	8
.....	5/8-11	.633	10
.....	5/8-11	.633	12
.....	5/8-11	.633	14
/R45652	3/4-10	.759	10
.....	3/4-10	.759	12
.....	3/4-10	.759	14

**TANDEM TAPS**  
 Acme



Combination roughing and finishing tap. Roughing section has free cutting 45° thread form with controlled chip loading; finishing section 29° thread form cuts split chip.

No.	Size	Thrd. Lgth. In.	Shank Lgth. In.	Shank Dia. In.	OA Lgth. In.
.....	1/2-10	2 5/8	1 15/16	.381	5
.....	5/8-8	3 1/2	2 9/16	.480	6 5/8
.....	3/4-6	4 1/2	2 7/8	.573	8
.....	7/8-6	4 1/2	3 13/16	.684	9
.....	1-5	6	3 3/4	.760	10 1/2
.....	1 1/8-5	6	4 1/8	.896	11
.....	1 1/4-5	6	5	1.021	12
.....	1 3/8-4	6 1/2	5 1/16	1.108	12 5/8
.....	1 1/2-4	6 1/2	5 7/16	1.108	13

**Our order desk is always ready to assist you.**

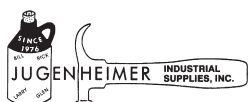
**LEFT HAND TAPS**

List 405L - Machine Screw Sizes



Ground thread. High speed steel.

No.	Tap Size	Major Dia. In.	Shank Dia. In.	Thrd. Lgth. In.	OA Lgth. In.	Ground Thread Limit	No. Flutes
/L02520I	1/4-20 NC	.2500	.225	1	2 1/2	H3	4
/L02528I	1/4-28 NF	.2500	.255	1	2 1/2	H3	4
/L03118I	5/16-18 NC	.3125	.318	1 1/8	2 23/32	H3	4
/L03124I	5/16-24 NF	.3125	.318	1 1/8	2 23/32	H3	4
/L03716I	3/8-16 NC	.3750	.381	1 1/4	2 19/16	H3	4
/L03724I	3/8-24 NF	.3750	.381	1 1/4	2 19/16	H3	4
/L04314I	7/16-14 NC	.4375	.323	1 7/16	3 3/32	H3	4
/L04320I	7/16-20 NF	.4375	.323	1 7/16	3 3/32	H3	4
/L05013I	1/2-13 NC	.5000	.367	1 21/32	3 3/8	H3	4
/L05025I	1/2-20 NF	.5000	.367	1 21/32	3 3/8	H3	4
/L05612I	9/16-12 NC	.5625	.429	1 21/32	3 19/32	H3	4
/L05618I	9/16-18 NF	.5625	.429	1 21/32	3 19/32	H3	4
/L06211I	5/8-11 NC	.6250	.480	1 13/16	3 13/16	H3	4
/L06218I	5/8-18 NF	.6250	.480	1 13/16	3 13/16	H3	4
.....	1 1/16-11 NS	.6875	.542	1 13/16	4 1/32	H3	4
.....	1 1/16-16 NS	.6875	.542	1 13/16	4 1/32	H3	4
/L07510I	3/4-10 NC	.7500	.590	2	4 1/4	H3	4
/L07516I	3/4-16 NF	.7500	.590	2	4 1/4	H3	4
/L08709I	7/8-9 NC	.8750	.697	2 7/32	4 11/16	H4	4
/L08714I	7/8-14 NF	.8750	.697	2 7/32	4 11/16	H4	4
/L10008I	1-8 NC	1.0000	.800	2 1/2	5 1/8	H4	4
/L10012I	1-12 NF	1.0000	.800	2 1/2	5 1/8	H4	4
/L10014I	1-14 NS	1.0000	.800	2 1/2	5 1/8	H4	4
/L11207I	1 1/8-7 NC	1.1250	.896	2 9/16	5 7/16	H4	4
/L11212I	1 1/8-12 NF	1.1250	.896	2 9/16	5 7/16	H4	4
/L12507I	1 1/4-7 NC	1.2500	1.021	2 9/16	5 3/4	H4	4
/L12512I	1 1/4-12 NF	1.2500	1.021	2 9/16	5 3/4	H4	6
/L13706I	1 3/8-6 NC	1.3750	1.108	3	6 1/16	H4	4
/L13712I	1 3/8-12 NF	1.3750	1.108	3	6 1/16	H4	6
/L15006I	1 1/2-6 NC	1.5000	1.233	3	6 3/8	H4	4
/L15012I	1 1/2-12 NF	1.5000	1.233	3	6 3/8	H4	6



**MULTIFLUTE TAPS**  
Series 405M - Metric



No.	Size	No. Flutes
.....	M5-.8	3
.....	M10-1.5	3
/M1201752V	M12-1.75	...
<b>Taper</b>		
/M0250450	M2.5-.45	3
/M0260450	M2.6-.45	3
/M0300500	M3-.5	3
/M0350600	M3.5-.6	3
/M0400700	M4-.7	4
/M0500810	M5-.8	4
/M0601000	M6-1.0	4
/M0701000	M7-1.0	4
/M0801250	M8-1.25	4
/M1001500	M10-1.5	4
/M1201750	M12-1.75	4
/M1402010	M14-2.0	4
/M1602000	M16-2.0	4
/M1802500	M18-2.5	4
/M2002500	M20-2.5	4
/M2202500	M22-2.5	4
/M2403000	M24-3.0	4
/M3003500	M30-3.5	4

No.	Size	No. Flutes
<b>Plug</b>		
/M0200401	M2-.4	3
/M0230401	M2.3-.4	3
/M0250451	M2.5-.45	3
/M0260451	M2.6-.45	3
/M0300501	M3-.5	3
/M0350601	M3.5-.6	3
/M0400501	M4-.5	4
/M0400701	M4-.7	4
/M0450751	M4.5-.75	4
/M0500501	M5-.5	4
/M0500811	M5-.8	4
/M0600751	M6-.75	4
/M0601001	M6-1.0	4
/M0700751	M7-.75	4
/M0701001	M7-1.0	4
/M0800751	M8-.75	4
/M0801001	M8-1.0	4
/M0801251	M8-1.25	4
/M0901251	M9-1.25	4
/M1001001	M10-1.0	4
/M1001251	M10-1.25	4
/M1001501	M10-1.5	4
/M1201001	M12-1.0	4
/M1201251	M12-1.25	4
/M1201501	M12-1.5	4
/M1201751	M12-1.75	4
/M1401001	M14-1.0	4
/M1401251	M14-1.25	4
/M1401501	M14-1.5	4
/M1402001	M14-2.0	4
/M1601001	M16-1.0	4
/M1601501	M16-1.5	4
/M1602001	M16-2.0	4
/M1801501	M18-1.5	4
/M1802001	M18-2.0	4
/M1802501	M18-2.5	4
/M2001001	M20-1.0	4
/M2001501	M20-1.5	4
/M2002501	M20-2.5	4
/M2201501	M22-1.5	4
/M2202501	M22-2.5	4
/M2401501	M24-1.5	4
/M2402001	M24-2.0	4
/M2403001	M24-3.0	4
/M2702001	M27-2.0	4
/M2703001	M27-3.0	4
/M2801501	M28-1.5	4
/M2802001	M28-2.0	4
/M3002001	M30-2.0	4
/M3003501	M30-3.5	4

No.	Size	No. Flutes
/M3005001	M30-5.0	4
/M3302001	M33-2.0	6
/M3604001	M36-4.0	6
/M4504501	M45-4.5	6
/M4805001	M48-5.0	6
<b>Bottom</b>		
/M0200402	M2-.4	3
/M0260452	M2.6-.45	3
/M0300502	M3-.5	3
/M0350602	M3.5-.6	3
/M0400702	M4-.7	4
/M0500812	M5-.8	4
/M0600752	M6-.75	4
/M0601002	M6-1.0	4
/M0701002	M7-1.0	4
/M0801252	M8-1.25	4
/M1001502	M10-1.5	4
/M1201752	M12-1.75	4
/M1402002	M14-2.0	4
/M1601002	M16-1.0	4
/M1602002	M16-2.0	4
/M1802502	M18-2.5	4
/M2002502	M20-2.5	4
/M2202502	M22-2.5	4
/M2403002	M24-3.0	4
/M3001502	M30-1.5	4
/M3003502	M30-3.5	4

**SPIRAL POINTED TAPS**  
Series 405M - Metric



No.	Size	No. Flutes
/M55602545	M2.5-.45	2
/M55603050	M3-.5	2
/M55603560	M3.5-.6	2
/M55604070	M4-.7	2
/M55604575	M4.5-.75	2
/M55605080	M5-.8	2
/M556060075	M6-.75	2
/M55606010	M6-1	2
/M556080075	M8-.75	2
/M55608010	M8-1	2
/M55608012	M8-1.25	2
/M5561010	M10-1	3
/M5561012	M10-1.25	3
/M5561015	M10-1.5	3
/M5561015N	M10-1.5	3
/M5561212	M12-1.25	3
/M5561215	M12-1.5	3
/M5561217	M12-1.75	3
/M5561412	M14-1.25	3
/M5561415	M14-1.5	3
/M5561420	M14-2	3
/M5561610	M16-1	3
/M5561615	M16-1.5	3
/M5561620	M16-2	3
/M5561815	M18-1.5	3
/M5561820	M18-2	3
/M5561825	M18-2.5	3
/M5562015	M20-1.5	3
/M5562025	M20-2.5	3

**RETHREADING DIES**  
Series 16 - Standard Thread - Hexagon



Carbon steel. Use for rethreading bruised, rusty or worn threads.

No.	Thrd. Size
2CDDH	2-56
2FDDH	2-64
3CDDH	3-48
3FDDH	3-56
4EDDH	4-36
4CDDH	4-40
.....	4-48
5CDDH	5-40
5FDDH	5-44
6CDDH	6-32
6FDDH	6-40
8CDDH	8-32
8FDDH	8-36
10CDDH	10-24
10FDDH	10-32
12CDDH	12-24
12FDDH	12-28
25CDDH	1/4-20
25FDDH	1/4-28
31CDDH	5/16-18
31FDDH	5/16-24
37CDDH	3/8-16
37FDDH	3/8-24
43CDDH	7/16-14
43FDDH	7/16-20
50CDDH	1/2-13
50FDDH	1/2-20
56CDDH	9/16-12
56FDDH	9/16-18
62CDDH	5/8-11
62FDDH	5/8-18
68CDDH	11/16-11
68FDDH	11/16-16
75CDDH	3/4-10
75FDDH	3/4-16
87CDDH	7/8-9
87FDDH	7/8-14
100CDDH	1-8
100EDDH	1-12
100FDDH	1-14
112CDDH	1 1/8-7
112FDDH	1 1/8-12
125CDDH	1 1/4-7
125FDDH	1 1/4-12
137CDDH	1 3/8-6
137FDDH	1 3/8-12
150CDDH	1 1/2-6
150FDDH	1 1/2-12

**RETHREADING DIES**  
Series 455 - Special Thread - Hexagon



Carbon steel. Use for rethreading bruised, rusty or worn threads.

No.	Thrd. Size
.....	1 1/8-8
.....	1 1/4-8
137UDDH	1 3/8-8
150UDDH	1 1/2-8
.....	1 5/8-5 1/2
162UDDH	1 5/8-8
.....	1 3/8-12
.....	1 3/4-5
.....	1 3/4-8
.....	1 3/4-12
.....	1 3/4-20
.....	1 7/8-5
.....	1 7/8-8
.....	1 7/8-12

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No.	Thrd. Size
.....	2-4 1/2
.....	2-8
.....	2-12
.....	2 1/8-8
.....	2 1/8-12
.....	2 1/4-4 1/2
.....	2 1/4-8
.....	2 1/4-12
.....	2 3/8-8
.....	2 3/8-12
.....	2 1/2-4
.....	2 1/2-8
.....	2 1/2-12
.....	2 5/8-8
.....	2 5/8-12
.....	2 3/4-8
.....	2 3/4-12
.....	2 7/8-8
.....	2 7/8-12
.....	3-8
.....	3-12
.....	3 1/4-8
.....	3 1/4-12
.....	3 1/2-8
.....	3 1/2-12
.....	4-8
.....	4-12

**RETHREADING DIES**

Series 456 - Pipe Size - Hexagon

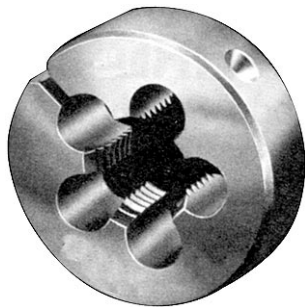


Carbon steel. Use for rethreading bruised, rusty or worn threads.

No.	Thrd. Size
.....	1/8-27
.....	1/4-18
.....	3/8-18
.....	1/2-14
.....	3/4-14
.....	1-11 1/2
.....	1 1/4-11 1/2
.....	1 1/2-11 1/2

**SPLIT DIES**

Series 12 - Standard Thread - Round



Screw adjustable. High speed steel.

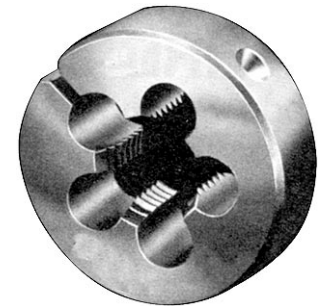
No.	Thrd. Size	OD In.
OC81DSR	0-80	13/16
1C81DSR	1-64	13/16
1F81DSR	1-72	13/16

No.	Thrd. Size	OD In.
2C81DSR	2-56	13/16
2F81DSR	2-64	13/16
3C81DSR	3-48	13/16
3F81DSR	3-56	13/16
4C81DSR	4-40	13/16
.....	4-48	13/16
5C81DSR	5-40	13/16
5F81DSR	5-44	13/16
.....	6-32	13/16
.....	6-40	13/16
8C81DSR	8-32	13/16
.....	8-36	13/16
10C81DSR	10-24	13/16
10F81DSR	10-32	13/16
.....	12-24	13/16
.....	12-28	13/16
25C81DSR	1/4-20	13/16
.....	1/4-28	13/16
.....	5/16-18	13/16
.....	5/16-24	13/16
.....	4-40	1
.....	4-48	1
.....	5-40	1
.....	5-44	1
6C100DSR	6-32	1
.....	6-40	1
8C100DSR	8-32	1
.....	8-36	1
10C100DSR	10-24	1
10F100DSR	10-32	1
12C100DSR	12-24	1
12F100DSR	12-28	1
25C100DSR	1/4-20	1
25F100DSR	1/4-28	1
31C100DSR	5/16-18	1
31F100DSR	5/16-24	1
37C100DSR	3/8-16	1
37F100DSR	3/8-24	1
43C100DSR	7/16-14	1
.....	7/16-20	1
50C100DSR	1/2-13	1
50F100DSR	1/2-20	1
25C150DSR	1/4-20	1 1/2
25F150DSR	1/4-28	1 1/2
31C150DSR	5/16-18	1 1/2
31F150DSR	5/16-24	1 1/2
37C150DSR	3/8-16	1 1/2
37F150DSR	3/8-24	1 1/2
43C150DSR	7/16-14	1 1/2
43F150DSR	7/16-20	1 1/2
50C150DSR	1/2-13	1 1/2
50F150DSR	1/2-20	1 1/2
56C150DSR	9/16-12	1 1/2
56F150DSR	9/16-18	1 1/2
62C150DSR	5/8-11	1 1/2
62F150DSR	5/8-18	1 1/2
.....	1 1/16-11	1 1/2
.....	1 1/16-16	1 1/2
75C150DSR	3/4-10	1 1/2
75F150DSR	3/4-16	1 1/2
.....	1/4-20	2
.....	1/4-28	2
.....	5/16-18	2
.....	5/16-24	2
.....	3/8-16	2
.....	3/8-24	2
.....	7/16-14	2
.....	7/16-20	2
50C200DSR	1/2-13	2
50F200DSR	1/2-20	2
.....	9/16-12	2
.....	9/16-18	2
62C200DSR	5/8-11	2
62F200DSR	5/8-18	2
75C200DSR	3/4-10	2
75F200DSR	3/4-16	2
87C200DSR	7/8-9	2
87F200DSR	7/8-14	2
100C200DSR	1-8	2
100E200DSR	1-12	2
100F200DSR	1-14	2

No.	Thrd. Size	OD In.
112C250DSR	1 1/8-7	2 1/2
112F250DSR	1 1/8-12	2 1/2
125C250DSR	1 1/4-7	2 1/2
125F250DSR	1 1/4-12	2 1/2
137C250DSR	1 3/8-6	2 1/2
.....	1 3/8-12	2 1/2
150C250DSR	1 1/2-6	2 1/2
150F250DSR	1 1/2-12	2 1/2
.....	1-8	3
.....	1-12	3
.....	1-14	3
.....	1 1/8-7	3
.....	1 1/8-12	3
.....	1 1/4-7	3
.....	1 1/4-12	3
.....	1 3/8-6	3
.....	1 3/8-12	3
.....	1 1/2-6	3
.....	1 1/2-12	3

**SPLIT DIES**

Series 13 - Special Thread - Round



Screw adjustable. High speed steel.

No.	Thrd. Size	OD In.
.....	1-56	13/16
.....	1-80	13/16
.....	2-72	13/16
.....	2-80	13/16
.....	3-72	13/16
.....	4-56	13/16
.....	4-72	13/16
.....	4-80	13/16
.....	5-32	13/16
.....	5-36	13/16
.....	5-48	13/16
.....	5-56	13/16
.....	5-64	13/16
.....	5-72	13/16
.....	6-30	13/16
.....	6-36	13/16
.....	6-56	13/16
.....	8-30	13/16
.....	8-40	13/16
.....	8-48	13/16
.....	8-56	13/16
.....	8-64	13/16
.....	10-26	13/16
.....	10-28	13/16
.....	10-30	13/16
.....	10-36	13/16
.....	10-60	13/16
.....	10-72	13/16
.....	12-30	13/16
.....	12-48	13/16
.....	12-56	13/16
.....	1/4-16	1
.....	1/4-18	1
.....	1/4-22	1
.....	1/4-24	1

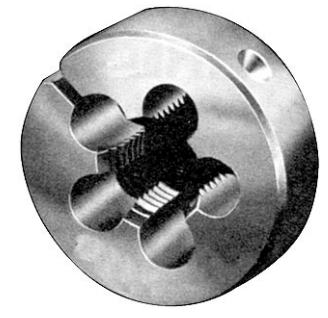
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No.	Thrd. Size	OD In.
.....	1/4-26	1
.....	1/4-27	1
.....	1/4-30	1
.....	1/4-32	1
.....	1/4-36	1
.....	1/4-40	1
.....	1/4-48	1
.....	1/4-56	1
.....	1/4-64	1
.....	1/4-72	1
.....	5/16-16	1
.....	5/16-20	1
.....	5/16-27	1
.....	5/16-28	1
.....	5/16-30	1
.....	5/16-32	1
.....	5/16-36	1
.....	5/16-40	1
.....	5/16-48	1
.....	5/16-56	1
.....	3/8-14	1
.....	3/8-18	1
.....	3/8-20	1
.....	3/8-27	1
.....	3/8-28	1
.....	3/8-30	1
.....	3/8-32	1
.....	3/8-36	1
.....	3/8-40	1
.....	3/8-48	1
.....	3/8-56	1
.....	7/16-12	1
.....	7/16-24	1
.....	7/16-27	1
.....	7/16-28	1
.....	7/16-30	1
.....	7/16-32	1
.....	7/16-36	1
.....	7/16-40	1
.....	7/16-48	1
.....	7/16-56	1
.....	1/4-24	1 1/2
.....	1/4-27	1 1/2
.....	1/4-32	1 1/2
.....	5/16-32	1 1/2
.....	3/8-32	1 1/2
.....	15/32-32	1 1/2
.....	1/2-12	1 1/2
.....	1/2-14	1 1/2
.....	1/2-16	1 1/2
.....	1/2-18	1 1/2
.....	1/2-24	1 1/2
.....	1/2-26	1 1/2
.....	1/2-27	1 1/2
.....	1/2-28	1 1/2
.....	1/2-30	1 1/2
.....	1/2-32	1 1/2
.....	1/2-36	1 1/2
.....	1/2-40	1 1/2
.....	1/2-48	1 1/2
.....	1/2-56	1 1/2
.....	9/16-14	1 1/2
.....	9/16-16	1 1/2
.....	9/16-20	1 1/2
.....	9/16-24	1 1/2
.....	9/16-27	1 1/2
.....	9/16-28	1 1/2
.....	9/16-32	1 1/2
.....	9/16-36	1 1/2
.....	9/16-40	1 1/2
.....	9/16-48	1 1/2
.....	5/8-10	1 1/2
.....	5/8-12	1 1/2
.....	5/8-14	1 1/2
.....	5/8-16	1 1/2
.....	5/8-20	1 1/2
.....	5/8-24	1 1/2
.....	5/8-27	1 1/2
.....	5/8-28	1 1/2
.....	5/8-32	1 1/2
.....	5/8-36	1 1/2

No.	Thrd. Size	OD In.
.....	5/8-40	1 1/2
.....	5/8-48	1 1/2
.....	5/8-56	1 1/2
.....	5/8-64	1 1/2
.....	1 1/16-12	1 1/2
.....	1 1/16-14	1 1/2
.....	1 1/16-20	1 1/2
.....	1 1/16-24	1 1/2
.....	1 1/16-27	1 1/2
.....	1 1/16-28	1 1/2
.....	1 1/16-32	1 1/2
.....	1 1/16-36	1 1/2
.....	1 1/16-40	1 1/2
.....	3/4-12	1 1/2
.....	3/4-14	1 1/2
.....	3/4-18	1 1/2
.....	3/4-20	1 1/2
.....	3/4-24	1 1/2
.....	3/4-27	1 1/2
.....	3/4-28	1 1/2
.....	3/4-30	1 1/2
.....	3/4-32	1 1/2
.....	3/4-36	1 1/2
.....	3/4-40	1 1/2
.....	3/4-48	1 1/2
.....	3/4-56	1 1/2
.....	13/16-10	2
.....	13/16-12	2
.....	13/16-14	2
.....	13/16-24	2
.....	13/16-28	2
.....	7/8-10	2
.....	7/8-12	2
.....	7/8-16	2
.....	7/8-18	2
.....	7/8-20	2
.....	7/8-24	2
.....	7/8-27	2
.....	7/8-32	2
.....	7/8-36	2
.....	7/8-40	2
.....	7/8-48	2
.....	15/16-9	2
.....	15/16-10	2
.....	15/16-12	2
.....	15/16-18	2
.....	15/16-20	2
.....	15/16-24	2
.....	15/16-27	2
.....	15/16-32	2
.....	1-10	2
.....	1-16	2
.....	1-18	2
.....	1-20	2
.....	1-24	2
.....	1-27	2
.....	1-28	2
.....	1-32	2
.....	1-36	2
.....	1-40	2
.....	1-48	2
.....	1-56	2
.....	1 1/8-8	2 1/2
.....	1 1/4-8	2 1/2
.....	1 3/8-8	2 1/2
.....	1 1/2-8	2 1/2
.....	1 5/8-	3
.....	5 1/2	3
.....	1 5/8-12	3
.....	1 3/4-5	3
.....	1 3/4-12	3
.....	1 7/8-5	3
.....	1 7/8-12	3
.....	2-4 1/2	3
.....	2-12	3

**SPLIT DIES**  
Series 14 - Pipe Size - Round



Screw adjustable. High speed steel.

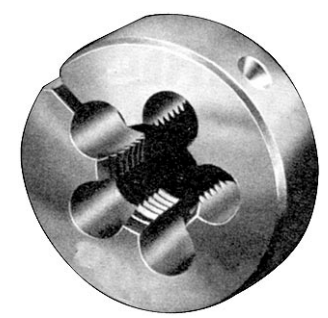
**NPT**

No.	Thrd. Size	OD In.
6K100DPT	1/16-27	1
.....	1/8-27	1
12K150DPT	1/8-27	1 1/2
25K150DPT	1/4-18	1 1/2
37K150DPT	3/8-18	1 1/2
50K200DPT	1/2-14	2
75K200DPT	3/4-14	2
100K250DPT	1-11 1/2	2 1/2
125K300DPT	1 1/4-11 1/2	3
150K350DPT	1 1/2-11 1/2	3 1/2

**NPS**

No.	Thrd. Size	OD In.
.....	1/16-27	1
.....	1/8-27	1
.....	1/4-18	1 1/2
.....	3/8-18	1 1/2
.....	1/2-14	2
.....	3/4-14	2
.....	1-11 1/2	2 1/2
.....	1 1/4-11 1/2	3
.....	1 1/2-11 1/2	3 1/2

**SPLIT DIES**  
Series 15 - Left Hand - Round



Screw adjustable. High speed steel.

No.	Thrd. Size	OD In.
.....	0-80	13/16
.....	1-64	13/16
.....	1-72	13/16
.....	2-56	13/16
.....	2-64	13/16
.....	3-48	13/16
.....	3-56	13/16
.....	4-40	13/16
.....	4-48	13/16

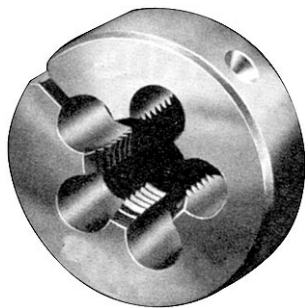
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No.	Thrd. Size	OD In.
.....	5-40	13/16
.....	5-44	13/16
.....	6-32	13/16
.....	6-40	13/16
.....	8-32	13/16
.....	8-36	13/16
.....	10-24	13/16
.....	10-32	13/16
.....	12-24	13/16
.....	12-28	13/16
.....	6-32	1
.....	8-32	1
.....	10-24	1
.....	10-32	1
.....	1/4-20	1
.....	1/4-28	1
.....	5/16-18	1
.....	5/16-24	1
.....	3/8-16	1
.....	3/8-24	1
.....	7/16-14	1
.....	7/16-20	1
.....	1/2-13	1
.....	1/2-20	1
.....	1/4-20	1 1/2
.....	5/16-18	1 1/2
.....	3/8-16	1 1/2
.....	1/2-13	1 1/2
.....	1/2-20	1 1/2
.....	9/16-12	1 1/2
.....	5/16-18	1 1/2
.....	5/8-11	1 1/2
.....	5/8-18	1 1/2
.....	3/4-10	1 1/2
.....	3/4-16	1 1/2
.....	7/8-9	2
.....	7/8-14	2
.....	1-8	2
.....	1-12	2
.....	1-14	2

**SPLIT DIES**

Series 17 - Metric - Round



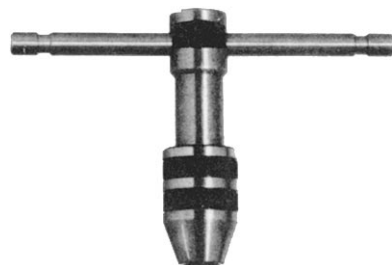
Screw adjustable. High speed steel.

No.	Dia. mm	Pitch mm	OD In.
.....	1.0	.20	1
.....	1.0	.25	1
.....	1.2	.20	1
.....	1.2	.25	1
.....	1.4	.20	1
.....	1.4	.30	1
.....	1.5	.30	1
.....	1.5	.35	1
.....	1.6	.35	1
.....	1.7	.20	1
.....	1.7	.35	1
.....	1.8	.35	1
.....	2.0	.25	1
.....	2.0	.40	1
.....	2.0	.45	1
.....	2.0	.50	1
.....	2.2	.45	1

No.	Dia. mm	Pitch mm	OD In.
.....	2.3	.25	1
.....	2.3	.40	1
.....	2.5	.45	1
.....	2.6	.35	1
.....	2.6	.45	1
.....	3.0	.60	1
.....	3.0	.75	1
.....	3.5	.35	1
.....	3.5	.60	1
.....	4.0	.50	1
.....	4.0	.70	1
.....	4.0	.75	1
.....	4.5	.50	1
.....	4.5	.75	1
.....	5.0	.50	1
.....	5.0	.75	1
.....	5.0	.80	1
.....	5.0	.90	1
.....	5.5	.70	1
.....	5.5	.90	1
.....	6.0	.50	1
.....	6.0	.75	1
.....	6.0	1.00	1
.....	6.0	1.25	1
.....	7.0	.50	1
.....	7.0	.75	1
.....	7.0	1.00	1
.....	7.0	1.25	1
.....	8.0	.75	1
.....	8.0	1.00	1
.....	8.0	1.25	1
.....	9.0	.75	1
.....	9.0	1.00	1
.....	9.0	1.25	1
.....	10.0	.75	1
.....	10.0	1.00	1
.....	10.0	1.25	1
.....	10.0	1.50	1
.....	11.0	.75	1
.....	11.0	1.00	1
.....	11.0	1.25	1
.....	11.0	1.50	1
.....	12.0	1.00	1
.....	12.0	1.25	1
.....	12.0	1.50	1
.....	12.0	1.75	1
.....	9.0	1.00	1 1/2
.....	9.0	1.25	1 1/2
.....	10.0	.75	1 1/2
.....	10.0	1.00	1 1/2
.....	10.0	1.25	1 1/2
.....	10.0	1.50	1 1/2
.....	11.0	1.00	1 1/2
.....	11.0	1.25	1 1/2
.....	11.0	1.50	1 1/2
.....	12.0	1.00	1 1/2
.....	12.0	1.25	1 1/2
.....	12.0	1.75	1 1/2
.....	13.0	1.50	1 1/2
.....	14.0	1.00	1 1/2
.....	14.0	1.25	1 1/2
.....	14.0	1.50	1 1/2
.....	14.0	1.75	1 1/2
.....	14.0	2.00	1 1/2
.....	15.0	1.50	1 1/2
.....	16.0	1.00	1 1/2
.....	16.0	1.25	1 1/2
.....	16.0	1.50	1 1/2
.....	16.0	1.75	1 1/2
.....	16.0	2.00	1 1/2
.....	17.0	1.50	1 1/2
.....	18.0	1.00	1 1/2
.....	18.0	1.50	1 1/2
.....	18.0	2.00	1 1/2
.....	18.0	2.50	1 1/2
.....	20.0	1.25	2
.....	20.0	1.50	2
.....	20.0	2.00	2
.....	20.0	2.50	2
.....	22.0	1.00	2

No.	Dia. mm	Pitch mm	OD In.
.....	22.0	1.50	2
.....	22.0	2.00	2
.....	22.0	2.50	2
.....	24.0	1.50	2
.....	24.0	2.00	2
.....	24.0	3.00	2
.....	25.0	1.00	2 1/2
.....	25.0	1.50	2 1/2
.....	25.0	2.50	2 1/2
.....	26.0	1.50	2 1/2
.....	27.0	1.00	2 1/2
.....	27.0	1.50	2 1/2
.....	27.0	2.00	2 1/2
.....	27.0	3.00	2 1/2
.....	28.0	1.00	2 1/2
.....	28.0	1.50	2 1/2
.....	28.0	2.00	2 1/2
.....	30.0	1.50	2 1/2
.....	30.0	2.00	2 1/2
.....	30.0	3.50	2 1/2

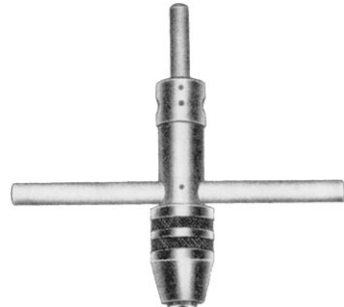
**TAP WRENCHES**  
Series 407 - T-Handle



Use on small drills and reamers. Hardened and tempered jaws.

No.	Model No.	Hand Tap Rge. In.	Machine Screw Tap Rge.
.....	TTW1	1/16-9/32	0-6
.....	TTW2	5/32-1/4	7-14
.....	TTW3	1/4-1/2	...

**TAP WRENCHES**  
Series 407 - Piloted Spindle



For drill presses, lathes and other machine tools. Thread drilled hole at 1 machine location without relocating work. Hardened and tempered jaws.

No.	Model No.	Hand Tap Rge. In.	Machine Screw Taps Rge.
.....	TTW12S	1/16-1/4	0-14
.....	TTW23S	1/4-1/2	...



6863 Commerce Drive  
Next To I-80  
Hubbard, Ohio 44425

Phone: (330) 534-8171  
Fax: (330) 534-8179  
Toll Free: (800) 533-8171

**TAP WRENCHES**  
Series 409 - Straight



Hardened jaws.

**No. 2340000.** For #0 to #14 machine screw taps.

**No. 2340040.** For #0 to #14 machine screw taps.

**No. 2340050.** For #7 to #14 machine screw taps and 1/8" pipe taps.

**No. 2340060.** For #7 to #14 machine screw taps and 1/8" to 1/4" pipe taps.

**No. 2340070.** For 1/8" to 3/4" pipe taps.

**No. 2340075.** For 1/8" to 1" pipe taps.

**No. 2340080.** For 3/8" to 1 1/4" pipe taps.

**No. 2340220.** For 3/4" to 2" pipe taps.

No.	Model No.	Hand		Lgth. In.
		Tap Rge. In.	Reamer Rge. In.	
...2340000	TW0	1/16-1/4	1/8-21/64	7
/56487442	TW4	1/16-3/8	1/8-25/64	9
/56487443	TW5	5/32-1/2	11/64-7/16	11
/56487444	TW6	5/32-3/4	11/64-41/64	15
/56487445	TW7	1/4-1 1/8	9/32-29/32	19
...2340075	TW7-1/2	1/2-1 3/8	3/4-1 9/32	31
...2340080	TW8	3/4-1 5/8	37/64-1 11/32	40
...2340220	TW22	1-2 1/2	7/8-2 1/8	54

**DIESTOCKS**  
Series 405

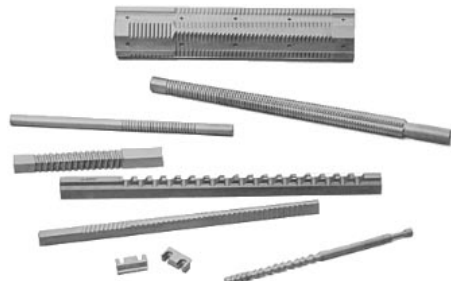


For adjustable, round, split dies. Eight sizes.

No.	No.	Dia. In.
...2320058	DS58	9/8
/56487451	DS0	1 13/16
/56487452	DS1	1
/56487454	DS15	1 1/2
/56487455	DS2	2
...2320025	DS25	2 1/2
...2320030	DS3	3
...2320035	DS35	3 1/2

**DUMONT**  
Special Broaches

Minute Man® - Push or Pull Types



**No. 1.** Pull-type broach for sizing width and depth of slot in one operation.

**No. 2.** Push-type 8 point or star shaped broach.

**No. 3.** Pull-type single-pass keyway broach with threaded type pull end.

**No. 4.** Pull-type broach for producing four inverted keyways.

**No. 5.** Push-type cut-and-finish keyway broach will cut an internal keyway, deburr the keyway, and finish the bore in one pass.

**No. 6.** Push-type broach to cut two keyways 180° apart in one pass. Can also be made in 3 and 4 keyway styles.

**No. 7.** Push-type D hole broach. Can also be made in double D style.

**No. 8.** Push-type rectangular broach (shear angle) for sizing rectangular hole, radar wave guide flanges and others.

**Limitations:** Manufacturing facilities limit production to an overall length of 36" or a cutting section length of 26". Will not furnish involute or broaches for elongated elliptical holes without a common center.

Complete Information Available on Request.

**DUMONT**

Keyway Broaches

Minute Man® - High Speed Steel



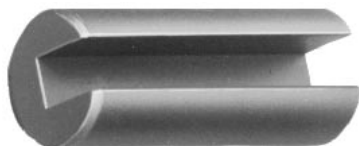
Individually packed. All required shims furnished with keyway broaches. Tin coating available. Metric available.

No.	Size	Tolerance Rge. In.	Dim. In.
...22201	1/16-A	.0625-.0635	1/8x5
22202	3/32-A	.0938-.0948	1/8x5
/645K22203	1/8-A	.1252-.1262	1/8x5
...22204	3/32-B	.0937-.0947	3/16x6 3/4
/645K22205	1/8-B	.1252-.1262	3/16x6 3/4
...22206	5/32-B	.1564-.1574	3/16x6 3/4
/645K22207	3/16-B	.1877-.1887	3/16x6 3/4
/645K22208	3/16-C	.1877-.1887	3/8x11 3/4
/645K22209	1/4-C	.2505-.2512	3/8x11 3/4
/645K22210	5/16-C	.3127-.3137	3/8x11 3/4
/645K22211	3/8-C	.3775-.3765	3/8x11 3/4
...22212	5/16-D	.3127-.3137	9/16x13 7/8
/645K22213	3/8-D	.3755-.3765	9/16x13 7/8
...22214	7/16-D	.4380-.4390	9/16x13 7/8
/645K22215	1/2-D	.5006-.5016	9/16x13 7/8
...22216	5/8-E	.6260-.6270	3/4x15 1/2
...22217	3/4-E	.7515-.7525	3/4x15 1/2
...22218	7/8-F	.8765-.8775	1x20 1/4
...22219	1-F	1.0015-1.0025	1x20 1/4

**DUMONT**

Keyway Bushings

Minute Man®



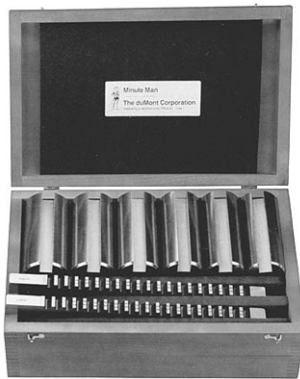
Bushing letters indicate use of corresponding keyway broaches.

**When ordering,** specify letter of keyway broach with which bushing will be used.

No.	Dia. In.	OA Lgth. In.
<b>Bushings A, Collared Only</b>		
...33301	1/4	1 1/8
...33302	5/16	1 1/8
...33303	3/8	1 1/8
...33304	7/16	1 1/8
...33305	1/2	1 1/8
<b>Bushings B, Collared Only</b>		
...33313	1/2	1 11/16
...33314	9/16	1 11/16
...33315	5/8	1 11/16
...33316	1 1/16	1 11/16
...33317	3/4	1 11/16
...33318	13/16	1 11/16
...33319	7/8	1 11/16
<b>Bushings C, Collared Only</b>		
...33334	3/4	2 1/2
...33335	13/16	2 1/2
...33336	7/8	2 1/2
...33337	15/16	2 1/2
...33338	1	2 1/2
...33339	1 1/16	2 1/2
...33340	1 1/8	2 1/2
...33341	1 3/16	2 1/2
...33342	1 1/4	2 1/2
...33343	1 5/16	2 1/2
...33344	1 3/8	2 1/2
...33345	1 7/16	2 1/2
...33346	1 1/2	2 1/2
...33347	1 9/16	2 1/2
<b>Bushings D, Plain Only</b>		
...33348	1 7/16	4
...33349	1 1/2	4
...33350	1 9/16	4
...33351	1 5/8	4
...33352	1 11/16	4
...33353	1 3/4	4
...33354	1 13/16	5
...33355	1 7/8	5
...33356	1 15/16	5
...33357	2	5
...33358	2 1/16	5
...33359	2 1/8	5
...33360	2 1/4	5
...33361	2 1/4	5
...33362	2 5/16	5
...33363	2 3/8	6
...33364	2 7/16	6
...33365	2 1/2	6
...33366	2 9/16	6
...33367	2 5/8	6
...33368	2 11/16	6
...33369	2 3/4	6
...33370	2 13/16	6
...33371	2 7/8	6
...33372	2 15/16	6
...33373	3	6
<b>Bushings E, Plain Only</b>		
...33374	2 5/16	6
...33375	2 3/8	6
...33376	2 7/16	6
...33377	2 1/2	6
...33378	2 9/16	6
...33379	2 5/8	6
...33380	2 11/16	6
...33381	2 3/4	6
...33382	2 13/16	6
...33383	2 7/8	6
...33384	2 15/16	6
...33385	3	6

**DUMONT**

**Keyway Broach Sets**  
 Minute Man® - High Speed Steel



Complete with precision broaches, slotted bushings and necessary shims in wooden box. For short run production and general maintenance.

**No. 11101.** Precision set. For small keyways and bores. With 3 broaches and 5 bushings; 15 combinations. Size In.: 1/16, 3/32, 1/8. Bushing diameters In.: 1/4, 5/16, 3/8, 7/16, 1/2.

**No. 11104.** Standard set. 18 combinations. With 4 broaches and 9 bushings; 18 combinations. Size In.: 1/8, 3/16, 1/4, 3/8. Bushing diameters In.: 1/2, 5/8, 3/4, 7/8, 1, 1 1/8, 1 1/4, 1 3/8, 1 1/2.

**No. 11108.** Standard set. 18 combinations. For 1/16-sized bores. With 4 broaches and 9 bushings; 18 combinations. Size In.: 1/8, 3/16, 1/4, 3/8. Bushing diameters In.: 9/16, 1 1/16, 1 3/16, 1 5/16, 1 7/16, 1 9/16.

**No. 11120.** Combination set. With 4 broaches and 18 bushings; 36 combinations. Size In.: 1/8, 3/16, 1/4, 3/8. Bushing diameters In.: 1/2, 9/16, 5/8, 1 1/16, 3/4, 1 3/16, 7/8, 1 5/16, 1, 1 1/16, 1 1/8, 1 3/8, 1 1/4, 1 5/16, 1 3/8, 1 7/16, 1 1/2, 1 9/16.

**No. 11121.** Combination set. With 5 broaches and 18 bushings; 47 combinations. Size In.: 1/8, 3/16, 1/4, 5/16, 3/8. Bushing diameters In.: 1/2, 9/16, 5/8, 1 1/16, 3/4, 1 3/16, 7/8, 1 5/16, 1, 1 1/16, 1 1/8, 1 3/8, 1 1/4, 1 5/16, 1 3/8, 1 7/16, 1 1/2, 1 9/16.

**No. 11127.** Standard set. With 4 broaches and 8 bushings; 32 combinations. For medium-sized keyways and bores. Size In.: 5/16, 3/8, 7/16, 1/2. Bushing diameters In.: 1 1/2, 1 5/8, 1 3/4, 1 7/8, 2, 2 1/8, 2 1/4, 2 1/2.

**No. 11129.** Standard set. With 4 broaches and 8 bushings; 32 combinations. For medium-sized keyways and bores. For 1/16-sized bores. Size In.: 5/16, 3/8, 7/16, 1/2. Bushing diameters In.: 1 7/16, 1 9/16, 1 11/16, 1 13/16, 1 15/16, 2 3/16, 2 7/16, 2 15/16.

**No. 11131.** Heavy duty set. For large keyways and bores. With 2 broaches and 6 bushings; 12 combinations. Size In.: 5/8, 3/4. Bushing diameters In.: 2 3/8, 2 1/2, 2 5/8, 2 3/4, 2 7/8, 3.

**No. 11133.** Heavy duty set. For large keyways and bores. With 2 broaches and 6 bushings; 12 combinations. For 1/16-sized bores. Size In.: 5/8, 3/4. Bushing diameters In.: 2 15/16, 2 7/16, 2 9/16, 2 11/16, 2 13/16, 2 15/16.

**No. 11135.** Heavy duty set. With 3 broaches and 17 bushings; 29 combinations. For medium and large keyways. Size In.: 1/2, 5/8, 3/4. Bushing diameters In.: 2, 2 1/16, 2 1/8, 2 3/16, 2 1/4, 2 5/16, 2 3/8, 2 7/16, 2 1/2, 2 9/16, 2 5/8, 2 11/16, 2 3/4, 2 13/16, 2 7/8, 2 15/16, 3.

**No. 11136.** Heavy duty combination set. With 9 broaches and 44 bushings; 102 combinations. Furnished in 3 wooden boxes. Size In.: 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4. Bushing diameters In.: collared, 1 1/2, 9/16, 5/8, 1 1/16, 3/4, 13/16, 7/8, 15/16, 1, 1 1/16, 1 1/8, 1 3/16, 1 1/4, 1 5/16, 1 3/8, 1 7/16, 1 1/2, 1 9/16. Plain, 1 7/16, 1 1/2, 1 9/16, 1 5/8, 1 11/16, 1 3/4, 1 13/16, 1 7/8, 1 15/16, 2, 2 1/16, 2 1/8, 2 3/16, 2 1/4, 2 5/16, 2 3/8, 2 7/16, 2 1/2, 2 9/16, 2 5/8, 2 11/16, 2 3/4, 2 13/16, 2 7/8, 2 15/16, 3.

No.	Model No.	Broach Style	Bushing Type
...11101	00	A	Collared
...11104	10	B, C	Collared
...11108	10A	B, C	Collared
...11120	10-10A	2 B, 2 C	Collared
...11121	20	2 B, 3 C	Collared
...11127	40A	2 D	Plain
...11129	40	2 D	Plain
...11131	40 1/2 A	2 E	Plain
...11133	40 1/2	2 E	Plain
...11135	50	D, 2 E	Plain
...11136	100	2 B, 2 C, 3 D, 2 E	Collared & Plain

**KEO CUTTERS**

**Woodruff Keyseat Cutters**

HSS - 1/2" Shank



Right-hand only. Set contains 41 cutter sizes from Standard Nos. 201 to Letter G or equivalent American Standard Nos. 202 to 1212. Furnished in hardwood box.

**No. /6458SET** Teeth Straight

**KEO CUTTERS**

**Woodruff Keyseat Cutters**

HSS - Right Hand Cut



Straight Teeth

For milling applications. 1/2" shank diameter. 2" shank length. Straight teeth.

**American**

No.	Std. No.	No. Teeth	Dia. In.	Thick. In.	OA Lgth. In.
/64520225	202	8	1/4	1/16	2 1/16
/64520250	202 1/2	8	5/16	1/16	2 1/16
/64530250	302 1/2	8	5/16	3/32	2 3/32
/645203	203	8	3/8	1/16	2 1/16
/645303	303	8	3/8	3/32	2 3/32
/645403	403	8	3/8	1/8	2 1/8
/645204	204	10	1/2	1/16	2 1/16
/645304	304	10	1/2	3/32	2 3/32
/645404	404	10	1/2	1/8	2 1/8
/645305	305	10	5/8	3/32	2 3/32
/645405	405	10	5/8	1/8	2 1/8
/645505	505	10	5/8	5/32	2 5/32
/645605	605	10	5/8	3/16	2 3/16
/645406	406	10	3/4	1/8	2 1/8
/645506	506	10	3/4	5/32	2 5/32
/645606	606	10	3/4	3/16	2 3/16
/645806	806	10	3/4	1/4	2 1/4
/645507	507	12	7/8	5/32	2 5/32
/645607	607	12	7/8	3/16	2 3/16
/645707	707	12	7/8	7/32	2 7/32
/645807	807	12	7/8	1/4	2 1/4
/645608	608	12	1	3/16	2 3/16
/645708	708	12	1	7/32	2 7/32
/645808	808	12	1	1/4	2 1/4
/6451008	1008	12	1	5/16	2 5/16
/6451208	1208	12	1	3/8	2 3/8
/645609	609	12	1 1/8	3/16	2 3/16
/645709	709	12	1 1/8	7/32	2 7/32
/645809	809	12	1 1/8	1/4	2 1/4
/6451009	1009	12	1 1/8	5/16	2 5/16
/645610	610	14	1 1/4	3/16	2 3/16
/645710	710	14	1 1/4	7/32	2 7/32
/645810	810	14	1 1/4	1/4	2 1/4
/6451010	1010	14	1 1/4	5/16	2 5/16
/6451210	1210	14	1 1/4	3/8	2 3/8
/645811	811	14	1 3/8	1/4	2 1/4
/6451011	1011	14	1 3/8	5/16	2 5/16
/6451211	1211	14	1 3/8	3/8	2 3/8
/645812	812	16	1 1/2	1/4	2 1/4
/6451012	1012	16	1 1/2	5/16	2 5/16
/6451212	1212	16	1 1/2	3/8	2 3/8

**KEO CUTTERS**

**T-Slot Cutters**

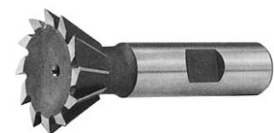
High Speed Steel - Hi-Speed



Straight shank. Alternating right and left-hand spiral; maximum chip room. Cutters other than righthand are special.

No.	Bolt Size	Dia. Cutter In.	Wdth. Cutter In.	Dia. Neck In.	OA Shank In.	OA Lgth. In.
/645T70140	1/4	9/16	15/64	17/64	1/2	2 19/32
/645T70560	5/16	21/32	17/64	21/64	1/2	2 19/32
/645T70380	3/8	25/32	21/64	13/32	3/4	3 1/4
/645T70120	1/2	31/32	25/64	17/32	3/4	3 7/16
/645T70580	5/8	1 1/4	31/64	21/32	1	3 15/16
/645T70340	3/4	1 15/32	5/8	25/32	1	4 7/16
/645T71000	1	1 27/32	53/64	1 1/32	1 1/4	4 13/16
/645T71140	1 1/4	2 7/32	1 3/32	1 7/32	1 1/4	5 3/8
/645T71120	1 1/2	2 21/32	1 11/32	1 17/32	1 1/4	5 29/32

**DOVETAIL CUTTERS**



Size range 3/8" to 2 1/2".

Complete Information Available on Request.



6863 Commerce Drive  
Next To I-80  
Hubbard, Ohio 44425

Phone: (330) 534-8171  
Fax: (330) 534-8179  
Toll Free: (800) 533-8171

**SIDE MILLING CUTTERS**

**Straight Tooth**



Size range 2" to 8".

When ordering, specify A or B cutters and grinding hubs for interlocked cutters. Cutters with same amount of teeth can be interlocked.

No.	Cutter Dia. In.	Wdth. In.	Hole Size In.	No. Teeth
.....	2	3/16	5/8	14
.....	2	1/4	5/8	14
.....	2	3/8	5/8	14
.....	2 1/2	1/4	7/8	18
.....	2 1/2	5/16	7/8	18
.....	2 1/2	3/8	7/8	18
.....	2 1/2	1/2	7/8	18
.....	3	3/16	1	20
.....	3	3/16	1 1/4	20
.....	3	7/32	1	20
.....	3	7/32	1 1/4	20
.....	3	1/4	1	20
.....	3	1/4	1 1/4	20
.....	3	9/32	1	20
.....	3	9/32	1 1/4	20
.....	3	5/16	1	20
.....	3	5/16	1 1/4	20
.....	3	11/32	1	20
.....	3	11/32	1 1/4	20
.....	3	3/8	1	20
.....	3	3/8	1 1/4	20
.....	3	13/32	1	20
.....	3	13/32	1 1/4	20
.....	3	7/16	1	20
.....	3	7/16	1 1/4	20
.....	3	1/2	1	20
.....	3	1/2	1 1/4	20
.....	3	9/16	1	20
.....	3	9/16	1 1/4	20
.....	3	5/8	1	20
.....	3	5/8	1 1/4	20
.....	3	11/16	1	20
.....	3	11/16	1 1/4	20
.....	3	3/4	1	20
.....	3	3/4	1 1/4	20
.....	3	13/16	1	20
.....	3	13/16	1 1/4	20
.....	3	7/8	1	20
.....	3	7/8	1 1/4	20
.....	3	15/16	1	20
.....	3	15/16	1 1/4	20
.....	3	1	1	20
.....	3	1	1 1/4	20
.....	3 1/2	3/16	1	20
.....	3 1/2	3/16	1	24
.....	3 1/2	3/16	1 1/4	20
.....	3 1/2	3/16	1 1/4	24
.....	3 1/2	1/4	1	20
.....	3 1/2	1/4	1	24
.....	3 1/2	1/4	1 1/4	20
.....	3 1/2	1/4	1 1/4	24
.....	3 1/2	5/16	1	20
.....	3 1/2	5/16	1	24
.....	3 1/2	5/16	1 1/4	20
.....	3 1/2	5/16	1 1/4	24
.....	3 1/2	3/8	1	20
.....	3 1/2	3/8	1	24
.....	3 1/2	3/8	1 1/4	20
.....	3 1/2	3/8	1 1/4	24
.....	3 1/2	3/8	1 1/4	28
.....	3 1/2	3/8	1 1/4	24
.....	3 1/2	7/16	1	20

No.	Cutter Dia. In.	Wdth. In.	Hole Size In.	No. Teeth
.....	3 1/2	7/16	1	24
.....	3 1/2	7/16	1 1/4	20
.....	3 1/2	7/16	1 1/4	24
.....	3 1/2	1/2	1	20
.....	3 1/2	1/2	1	24
.....	3 1/2	1/2	1 1/4	20
.....	3 1/2	1/2	1 1/4	24
.....	3 1/2	9/16	1	20
.....	3 1/2	9/16	1	24
.....	3 1/2	9/16	1 1/4	20
.....	3 1/2	9/16	1 1/4	24
.....	3 1/2	5/8	1	20
.....	3 1/2	5/8	1	24
.....	3 1/2	5/8	1 1/4	20
.....	3 1/2	5/8	1 1/4	24
.....	3 1/2	1 1/16	1	20
.....	3 1/2	1 1/16	1	24
.....	3 1/2	1 1/16	1 1/4	20
.....	3 1/2	1 1/16	1 1/4	24
.....	3 1/2	3/4	1	20
.....	3 1/2	3/4	1 1/4	20
.....	3 1/2	3/4	1 1/4	24
.....	3 1/2	13/16	1	20
.....	3 1/2	13/16	1	24
.....	3 1/2	13/16	1 1/4	20
.....	3 1/2	13/16	1 1/4	24
.....	3 1/2	7/8	1	20
.....	3 1/2	7/8	1	24
.....	3 1/2	7/8	1 1/4	20
.....	3 1/2	7/8	1 1/4	24
.....	3 1/2	15/16	1	20
.....	3 1/2	15/16	1	24
.....	3 1/2	15/16	1 1/4	20
.....	3 1/2	15/16	1 1/4	24
.....	3 1/2	1	1	20
.....	3 1/2	1	1	24
.....	3 1/2	1	1 1/4	20
.....	3 1/2	1	1 1/4	24
.....	4	3/16	1	24
.....	4	3/16	1 1/4	24
.....	4	7/32	1	24
.....	4	7/32	1 1/4	24
.....	4	1/4	1	24
.....	4	1/4	1 1/4	24
.....	4	9/32	1	24
.....	4	9/32	1 1/4	24
.....	4	5/16	1	24
.....	4	5/16	1 1/4	24
.....	4	11/32	1	24
.....	4	11/32	1 1/4	24
.....	4	3/8	1	24
.....	4	3/8	1 1/4	24
.....	4	13/32	1	24
.....	4	13/32	1 1/4	24
.....	4	7/16	1	24
.....	4	7/16	1 1/4	24
.....	4	1/2	1	24
.....	4	1/2	1 1/4	24
.....	4	9/16	1	24
.....	4	9/16	1 1/4	24
.....	4	5/8	1	24
.....	4	5/8	1 1/4	24
.....	4	5/8	1 1/4	28
.....	4	11/16	1	24
.....	4	11/16	1 1/4	24
.....	4	3/4	1	24
.....	4	3/4	1 1/4	24
.....	4	13/16	1	24
.....	4	13/16	1 1/4	24
.....	4	7/8	1	24
.....	4	7/8	1 1/4	24
.....	4	15/16	1	24
.....	4	15/16	1 1/4	24
.....	4	1	1	24
.....	4	1	1 1/4	24
.....	4 1/2	3/16	1	24
.....	4 1/2	3/16	1 1/4	24
.....	4 1/2	1/4	1	24
.....	4 1/2	1/4	1 1/4	24
.....	4 1/2	5/16	1	24

No.	Cutter Dia. In.	Wdth. In.	Hole Size In.	No. Teeth
.....	4 1/2	5/16	1 1/4	24
.....	4 1/2	3/8	1	24
.....	4 1/2	3/8	1 1/4	24
.....	4 1/2	7/16	1	24
.....	4 1/2	7/16	1 1/4	24
.....	4 1/2	1/2	1	24
.....	4 1/2	1/2	1 1/4	24
.....	4 1/2	9/16	1	24
.....	4 1/2	9/16	1 1/4	24
.....	4 1/2	5/8	1	24
.....	4 1/2	5/8	1 1/4	24
.....	4 1/2	11/16	1	24
.....	4 1/2	11/16	1 1/4	24
.....	4 1/2	3/4	1	24
.....	4 1/2	3/4	1 1/4	24
.....	4 1/2	13/16	1	24
.....	4 1/2	13/16	1 1/4	24
.....	4 1/2	7/8	1	24
.....	4 1/2	7/8	1 1/4	24
.....	4 1/2	15/16	1	24
.....	4 1/2	15/16	1 1/4	24
.....	4 1/2	1	1	24
.....	4 1/2	1	1 1/4	24
.....	5	3/16	1	24
.....	5	3/16	1 1/4	24
.....	5	7/32	1	24
.....	5	7/32	1 1/4	24
.....	5	1/4	1	24
.....	5	1/4	1 1/4	24
.....	5	9/32	1	24
.....	5	9/32	1 1/4	24
.....	5	5/16	1	24
.....	5	5/16	1 1/4	24
.....	5	11/32	1	24
.....	5	11/32	1 1/4	24
.....	5	3/8	1	24
.....	5	3/8	1 1/4	24
.....	5	13/32	1	24
.....	5	13/32	1 1/4	24
.....	5	7/16	1	24
.....	5	7/16	1 1/4	24
.....	5	1/2	1	24
.....	5	1/2	1 1/4	24
.....	5	9/16	1	24
.....	5	9/16	1 1/4	24
.....	5	5/8	1	24
.....	5	5/8	1 1/4	24
.....	5	11/16	1	24
.....	5	11/16	1 1/4	24
.....	5	3/4	1	24
.....	5	3/4	1 1/4	24
.....	5	13/16	1	24
.....	5	13/16	1 1/4	24
.....	5	7/8	1	24
.....	5	7/8	1 1/4	24
.....	5	15/16	1	24
.....	5	15/16	1 1/4	24
.....	5	1	1	24
.....	5	1	1 1/4	24
.....	5 1/2	3/16	1	24
.....	5 1/2	3/16	1	28
.....	5 1/2	3/16	1 1/4	24
.....	5 1/2	3/16	1 1/4	28
.....	5 1/2	1/4	1	24
.....	5 1/2	1/4	1 1/4	24
.....	5 1/2	1/4	1 1/4	28
.....	5 1/2	5/16	1	24
.....	5 1/2	5/16	1	28
.....	5 1/2	5/16	1 1/4	24
.....	5 1/2	5/16	1 1/4	28
.....	5 1/2	3/8	1	24
.....	5 1/2	3/8	1	28
.....	5 1/2	3/8	1 1/4	24
.....	5 1/2	3/8	1 1/4	28
.....	5 1/2	7/16	1	24
.....	5 1/2	7/16	1	28
.....	5 1/2	7/16	1 1/4	24
.....	5 1/2	7/16	1 1/4	28
.....	5 1/2	1/2	1	24

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No.	Cutter Dia. In.	Wdth. In.	Hole Size In.	No. Teeth
.....	5 1/2	1/2	1	28
.....	5 1/2	1/2	1 1/4	24
.....	5 1/2	1/2	1 1/4	28
.....	5 1/2	9/16	1	24
.....	5 1/2	9/16	1	28
.....	5 1/2	9/16	1 1/4	24
.....	5 1/2	9/16	1 1/4	28
.....	5 1/2	5/8	1	24
.....	5 1/2	5/8	1	28
.....	5 1/2	5/8	1 1/4	24
.....	5 1/2	5/8	1 1/4	28
.....	5 1/2	1 1/16	1	24
.....	5 1/2	1 1/16	1	28
.....	5 1/2	1 1/16	1 1/4	24
.....	5 1/2	1 1/16	1 1/4	28
.....	5 1/2	3/4	1	24
.....	5 1/2	3/4	1	28
.....	5 1/2	3/4	1 1/4	24
.....	5 1/2	3/4	1 1/4	28
.....	5 1/2	13/16	1	24
.....	5 1/2	13/16	1	28
.....	5 1/2	13/16	1 1/4	24
.....	5 1/2	13/16	1 1/4	28
.....	5 1/2	7/8	1	24
.....	5 1/2	7/8	1	28
.....	5 1/2	7/8	1 1/4	24
.....	5 1/2	7/8	1 1/4	28
.....	5 1/2	15/16	1	24
.....	5 1/2	15/16	1	28
.....	5 1/2	15/16	1 1/4	24
.....	5 1/2	15/16	1 1/4	28
.....	5 1/2	1	1	24
.....	5 1/2	1	1	28
.....	5 1/2	1	1 1/4	24
.....	5 1/2	1	1 1/4	28
.....	6	3/16	1	28
.....	6	3/16	1 1/4	28
.....	6	7/32	1	28
.....	6	7/32	1 1/4	28
.....	6	1/4	1	28
.....	6	1/4	1 1/4	28
.....	6	9/32	1	28
.....	6	9/32	1 1/4	28
.....	6	5/16	1	28
.....	6	5/16	1 1/4	28
.....	6	1 1/32	1	28
.....	6	1 1/32	1 1/4	28
.....	6	3/8	1	28
.....	6	3/8	1 1/4	28
.....	6	13/32	1	28
.....	6	13/32	1 1/4	28
.....	6	7/16	1	28
.....	6	7/16	1 1/4	28
.....	6	1/2	1	28
.....	6	1/2	1 1/4	28
.....	6	9/16	1	28
.....	6	9/16	1 1/4	28
.....	6	5/8	1	28
.....	6	5/8	1 1/4	28
.....	6	1 1/16	1	28
.....	6	1 1/16	1 1/4	28
.....	6	3/4	1	28
.....	6	3/4	1 1/4	28
.....	6	13/16	1	28
.....	6	13/16	1 1/4	28
.....	6	7/8	1	28
.....	6	7/8	1 1/4	28
.....	6	15/16	1	28
.....	6	15/16	1 1/4	28
.....	6	1	1	28
.....	6	1	1 1/4	28
.....	8	5/16	1 1/4	34
.....	8	3/8	1 1/4	34
.....	8	1/2	1 1/4	34
.....	8	3/4	1 1/4	34
.....	8	3/4	1 1/2	34
.....	8	1	1 1/4	34

**SIDE MILLING CUTTERS**

**Staggered Tooth**



Size range 2 1/2" to 8".

When ordering, specify number of teeth desired. Cutters with same amount of teeth can be interlocked.

No.	Cutter Dia. In.	Wdth. In.	Hole Size In.	No. Teeth
.....	2 1/2	1/4	7/8	16
.....	2 1/2	5/16	7/8	16
.....	2 1/2	3/8	7/8	16
.....	2 1/2	1/2	7/8	16
.....	3	3/16	1	18
.....	3	1/4	1	18
.....	3	1/4	1 1/4	18
.....	3	9/32	1	18
.....	3	9/32	1 1/4	18
.....	3	5/16	1	18
.....	3	5/16	1 1/4	18
.....	3	1 1/32	1	18
.....	3	1 1/32	1 1/4	18
.....	3	3/8	1	18
.....	3	3/8	1 1/4	18
.....	3	13/32	1	18
.....	3	13/32	1 1/4	18
.....	3	7/16	1	18
.....	3	7/16	1 1/4	18
.....	3	1/2	1	18
.....	3	1/2	1 1/4	18
.....	3	9/16	1	18
.....	3	9/16	1 1/4	18
.....	3	5/8	1	18
.....	3	5/8	1 1/4	18
.....	3	5/8	1 1/4	18
.....	3	1 1/16	1	18
.....	3	1 1/16	1 1/4	18
.....	3	3/4	1	18
.....	3	3/4	1 1/4	18
.....	3	13/16	1	18
.....	3	13/16	1 1/4	18
.....	3	7/8	1	18
.....	3	7/8	1 1/4	18
.....	3	15/16	1	18
.....	3	15/16	1 1/4	18
.....	3	1	1	18
.....	3	1	1 1/4	18
.....	3	1 1/4	1	18
.....	3	1 1/4	1 1/4	18
.....	3 1/2	7/32	1	18
.....	3 1/2	7/32	1 1/4	18
.....	3 1/2	1/4	1	18
.....	3 1/2	1/4	1 1/4	18
.....	3 1/2	9/32	1	18
.....	3 1/2	9/32	1 1/4	18
.....	3 1/2	5/16	1	18
.....	3 1/2	5/16	1 1/4	18
.....	3 1/2	5/16	1 1/4	18
.....	3 1/2	1 1/32	1	18
.....	3 1/2	1 1/32	1 1/4	18
.....	3 1/2	3/8	1	18
.....	3 1/2	3/8	1 1/4	18
.....	3 1/2	13/32	1	18
.....	3 1/2	13/32	1 1/4	18
.....	3 1/2	7/16	1	18
.....	3 1/2	7/16	1 1/4	18
.....	3 1/2	1/2	1	18
.....	3 1/2	1/2	1 1/4	18
.....	3 1/2	5/8	1	18
.....	3 1/2	5/8	1 1/4	18
.....	3 1/2	5/8	1 1/4	18
.....	3 1/2	5/8	1 1/4	18
.....	3 1/2	9/16	1	18

No.	Cutter Dia. In.	Wdth. In.	Hole Size In.	No. Teeth
.....	3 1/2	9/16	1 1/4	18
.....	3 1/2	5/8	1	18
.....	3 1/2	5/8	1 1/4	18
.....	3 1/2	1 1/16	1	18
.....	3 1/2	1 1/16	1 1/4	18
.....	3 1/2	3/4	1	18
.....	3 1/2	3/4	1 1/4	18
.....	3 1/2	13/16	1	18
.....	3 1/2	13/16	1 1/4	18
.....	3 1/2	7/8	1	18
.....	3 1/2	7/8	1 1/4	18
.....	3 1/2	15/16	1	18
.....	3 1/2	15/16	1 1/4	18
.....	3 1/2	1	1	18
.....	3 1/2	1	1 1/4	18
.....	4	3/16	1	18
.....	4	3/16	1 1/4	18
.....	4	7/32	1	18
.....	4	7/32	1 1/4	18
.....	4	1/4	1	18
.....	4	1/4	1 1/4	18
.....	4	9/32	1	18
.....	4	9/32	1 1/4	18
.....	4	5/16	1	18
.....	4	5/16	1 1/4	18
.....	4	1 1/32	1	18
.....	4	1 1/32	1 1/4	18
.....	4	3/8	1	18
.....	4	3/8	1 1/4	18
.....	4	13/32	1	18
.....	4	13/32	1 1/4	18
.....	4	7/16	1	18
.....	4	7/16	1 1/4	18
.....	4	1/2	1	18
.....	4	1/2	1 1/4	18
.....	4	9/16	1	18
.....	4	9/16	1 1/4	18
.....	4	5/8	1	18
.....	4	5/8	1 1/4	18
.....	4	7/8	1	18
.....	4	7/8	1 1/4	18
.....	4	15/16	1	18
.....	4	15/16	1 1/4	18
.....	4	1	1	18
.....	4	1	1 1/4	18
.....	4	1 1/8	1	18
.....	4	1 1/8	1 1/4	18
.....	4	1 1/4	1	18
.....	4	1 1/4	1 1/4	18
.....	4	1 1/2	1	18
.....	4	1 1/2	1 1/4	18
.....	4 1/2	7/32	1	18
.....	4 1/2	7/32	1	24
.....	4 1/2	7/32	1 1/4	18
.....	4 1/2	7/32	1 1/4	24
.....	4 1/2	1/4	1	18
.....	4 1/2	1/4	1	24
.....	4 1/2	1/4	1 1/4	18
.....	4 1/2	1/4	1 1/4	24
.....	4 1/2	5/16	1	18
.....	4 1/2	5/16	1	24
.....	4 1/2	5/16	1 1/4	18
.....	4 1/2	5/16	1 1/4	24
.....	4 1/2	3/8	1	18
.....	4 1/2	3/8	1	24
.....	4 1/2	3/8	1 1/4	18
.....	4 1/2	3/8	1 1/4	24
.....	4 1/2	1/2	1	18
.....	4 1/2	1/2	1	24
.....	4 1/2	1/2	1 1/4	18
.....	4 1/2	1/2	1 1/4	24
.....	4 1/2	5/8	1	18
.....	4 1/2	5/8	1	24
.....	4 1/2	5/8	1 1/4	18
.....	4 1/2	5/8	1 1/4	24

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No.	Cutter Dia. In.	Wdth. In.	Hole Size In.	No. Teeth
.....	4 1/2	3/4	1	18
.....	4 1/2	3/4	1	24
.....	4 1/2	3/4	1 1/4	18
.....	4 1/2	3/4	1 1/4	24
.....	4 1/2	7/8	1	18
.....	4 1/2	7/8	1	24
.....	4 1/2	7/8	1 1/4	18
.....	4 1/2	7/8	1 1/4	24
.....	4 1/2	1	1	18
.....	4 1/2	1	1	24
.....	4 1/2	1	1 1/4	18
.....	4 1/2	1	1 1/4	24
.....	4 1/2	1 1/4	1	18
.....	4 1/2	1 1/4	1	24
.....	4 1/2	1 1/4	1 1/4	18
.....	4 1/2	1 1/4	1 1/4	24
.....	5	7/32	1	24
.....	5	7/32	1 1/4	24
.....	5	1/4	1	24
.....	5	1/4	1 1/4	24
.....	5	9/32	1	24
.....	5	9/32	1 1/4	24
.....	5	5/16	1	24
.....	5	5/16	1 1/4	24
.....	5	11/32	1	24
.....	5	11/32	1 1/4	24
.....	5	3/8	1	24
.....	5	3/8	1 1/4	24
.....	5	13/32	1	24
.....	5	13/32	1 1/4	24
.....	5	7/16	1	24
.....	5	7/16	1 1/4	24
.....	5	15/32	1	24
.....	5	15/32	1 1/4	24
.....	5	1/2	1	24
.....	5	1/2	1 1/4	24
.....	5	17/32	1 1/4	24
.....	5	9/16	1	24
.....	5	9/16	1 1/4	24
.....	5	19/32	1 1/4	24
.....	5	5/8	1	24
.....	5	5/8	1 1/4	24
.....	5	11/16	1	24
.....	5	11/16	1 1/4	24
.....	5	3/4	1	24
.....	5	3/4	1 1/4	24
.....	5	13/16	1	24
.....	5	13/16	1 1/4	24
.....	5	7/8	1	24
.....	5	7/8	1 1/4	24
.....	5	15/16	1 1/4	24
.....	5	1	1	24
.....	5	1	1 1/4	24
.....	5	1 1/4	1 1/4	24
.....	5	1 1/2	1 1/4	24
.....	5 1/2	1/4	1	24
.....	5 1/2	1/4	1 1/4	24
.....	5 1/2	5/16	1	24
.....	5 1/2	5/16	1 1/4	24
.....	5 1/2	3/8	1	24
.....	5 1/2	3/8	1 1/4	24
.....	5 1/2	1/2	1	24
.....	5 1/2	1/2	1 1/4	24
.....	5 1/2	5/8	1	24
.....	5 1/2	5/8	1 1/4	24
.....	5 1/2	3/4	1	24
.....	5 1/2	3/4	1 1/4	24
.....	5 1/2	7/8	1	24
.....	5 1/2	7/8	1 1/4	24
.....	5 1/2	1	1	24
.....	5 1/2	1	1 1/4	24
.....	5 1/2	1 1/4	1	24
.....	5 1/2	1 1/4	1 1/4	24
.....	6	1/4	1	24
.....	6	1/4	1 1/4	24
.....	6	9/32	1	24
.....	6	9/32	1 1/4	24
.....	6	5/16	1	24
.....	6	5/16	1 1/4	24
.....	6	11/32	1	24

No.	Cutter Dia. In.	Wdth. In.	Hole Size In.	No. Teeth
.....	6	1 1/32	1 1/4	24
.....	6	3/8	1	24
.....	6	3/8	1 1/4	24
.....	6	13/32	1	24
.....	6	13/32	1 1/4	24
.....	6	7/16	1	24
.....	6	7/16	1 1/4	24
.....	6	15/32	1	24
.....	6	15/32	1 1/4	24
.....	6	1/2	1	24
.....	6	1/2	1 1/4	24
.....	6	17/32	1 1/4	24
.....	6	9/16	1	24
.....	6	9/16	1 1/4	24
.....	6	5/8	1	24
.....	6	5/8	1 1/4	24
.....	6	11/16	1	24
.....	6	11/16	1 1/4	24
.....	6	3/4	1	24
.....	6	3/4	1 1/4	24
.....	6	13/16	1	24
.....	6	13/16	1 1/4	24
.....	6	7/8	1	24
.....	6	7/8	1 1/4	24
.....	6	15/16	1	24
.....	6	15/16	1 1/4	24
.....	6	1	1 1/4	24
.....	6	1	1 1/4	24
.....	6	1 1/8	1 1/4	24
.....	6	1 3/16	1 1/4	24
.....	6	1 1/4	1 1/4	24
.....	8	1/4	1 1/4	28
.....	8	1/4	1 1/2	28
.....	8	5/16	1 1/4	28
.....	8	5/16	1 1/2	28
.....	8	3/8	1 1/4	28
.....	8	3/8	1 1/2	28
.....	8	1/2	1 1/4	28
.....	8	1/2	1 1/2	28
.....	8	5/8	1 1/4	28
.....	8	5/8	1 1/2	28
.....	8	3/4	1 1/4	28
.....	8	3/4	1 1/2	28
.....	8	1	1 1/4	28

**CIRCULAR SAW BLADES**  
Metal Slitting - Concave Sides - w/o Side Teeth



With standard keyway; sides ground concave for clearance. Recommended that these saws be revolved by key extending into collars on both sides. Size range 2 1/2" to 6".

Complete Information Available on Request.

**Our order desk is always ready to assist you.**

**METAL SLITTING SAW BLADES**  
Staggered Tooth



Side chip clearance and peripheral teeth provide alternative shearing action. For faster chip removal and deeper cuts when a heavy feed is necessary. All blades with same number of teeth can be interlocked by grinding hubs. Size range 3" to 8".

Complete Information Available on Request.

**MILLING CUTTERS**

Size range 2 1/2" to 4".



**Light Duty.** For light milling or finish cuts. Left hand spiral, right hand cut.



**Heavy Duty.** 45° left hand spiral, right hand cut.

Complete Information Available on Request.

**KEYSEAT CUTTERS**

Woodruff

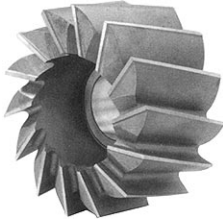


Larger in diameter than nominal size by 1/32" for sharpening allowance. Staggered Tooth Cutters with same amount of teeth. Interlocked by grinding hubs. Size range 2 1/8" to 3 1/2".

Complete Information Available on Request.

**SHELL END MILLS**

**Straight Tooth - Side Teeth**

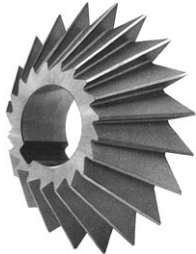


**General Purpose.** Right and left hand helix. Size range 1 1/4" to 6".

Complete Information Available on Request.

**ANGLE MILLING CUTTERS**

**Single Angle**



20 teeth. Size range 2 3/4" to 4".

Complete Information Available on Request.

**ANGLE MILLING CUTTERS**

**Double Angle**



20 teeth.

No.	Dia. In.	Wdth. In.	Hole Size In.	Incl. Angle Deg.
.....	2 3/4	1/2	1	45
.....	3	1/2	1	45
.....	4	1/2	1 1/4	45
.....	4	3/4	1 1/4	45
.....	2 3/4	1/2	1	60
.....	3	1/2	1	60
.....	4	1/2	1 1/4	60
.....	4	3/4	1 1/4	60
.....	4	1	1 1/4	60
.....	2 3/4	1/2	1	90
.....	3	1/2	1	90
.....	4	1/2	1 1/4	90
.....	4	3/4	1 1/4	90
.....	4	1	1 1/4	90

**WALTON COMPANY**

**Tap Extractors**

For Machine Screw & Hand Taps



For removing taps broken at or below the surface of work without annealing, drilling or damage to threads or work.

Fingers of specially tempered crucible steel. Specify no. of fluted taps - 2, 3, 4 or 6. Four fluted style supplied unless otherwise specified. Parts not interchangeable between flute sizes. Orders for 10 or more sizes shipped in metal box on request. Extra fingers have minimum package quantity of 12/size.

No.	No. Flutes Complete	Tap Extractor Size
4CTE2	2	#4
5CTE2	2	#5
6CTE2	2	#6
8CTE2	2	#8
10CTE2	2	#10 3/16"
12CTE2	2	#12
25CTE2	2	1/4"
31CTE2	2	5/16"
37CTE2	2	3/8"
43CTE2	2	7/16"
50CTE2	2	1/2"
4CTE3	3	#4
5CTE3	3	#5
6CTE3	3	#6
8CTE3	3	#8
10CTE3	3	#10 3/16"
12CTE3	3	#12
25CTE3	3	1/4"
31CTE3	3	5/16"
37CTE3	3	3/8"
43CTE3	3	7/16"
50CTE3	3	1/2"
56CTE3	3	9/16"
62CTE3	3	5/8"
75CTE3	3	3/4"
87CTE3	3	7/8"
100CTE3	3	1"
6CTE4	4	#6
8CTE4	4	#8
10CTE4	4	#10 3/16"
12CTE4	4	#12
25CTE4	4	1/4"
.....	4	9/32"
31CTE4	4	5/16"
.....	4	11/32"
37CTE4	4	3/8"
.....	4	13/32"
43CTE4	4	7/16"
50CTE4	4	1/2"
56CTE4	4	9/16"
62CTE4	4	5/8"
68CTE4	4	11/16"
75CTE4	4	3/4"
87CTE4	4	7/8"
100CTE4	4	1"
112CTE4	4	1 1/8"
125CTE4	4	1 1/4"
137CTE4	4	1 3/8"
150CTE4	4	1 1/2"
.....	6	1 1/8"
.....	6	1 1/4"
.....	6	1 3/8"
.....	6	1 1/2"
4CTF2	2	#4
5CTF2	2	#5
6CTF2	2	#6
8CTF2	2	#8
10CTF2	2	#10 3/16"
12CTF2	2	#12
25CTF2	2	1/4"
31CTF2	2	5/16"
37CTF2	2	3/8"
43CTF2	2	7/16"
50CTF2	2	1/2"
4CTF3	3	#4
5CTF3	3	#5
6CTF3	3	#6

**Extra Fingers**

No.	No. Flutes	Tap Extractor Size
8CTF3	3	#8
10CTF3	3	#10 3/16"
12CTF3	3	#12
25CTF3	3	1/4"
31CTF3	3	5/16"
37CTF3	3	3/8"
43CTF3	3	7/16"
50CTF3	3	1/2"
56CTF3	3	9/16"
62CTF3	3	5/8"
75CTF3	3	3/4"
87CTF3	3	7/8"
100CTF3	3	1"
6CTF4	4	#6
8CTF4	4	#8
10CTF4	4	#10 3/16"
12CTF4	4	#12
25CTF4	4	1/4"
.....	4	9/32"
31CTF4	4	5/16"
.....	4	11/32"
37CTF4	4	3/8"
.....	4	13/32"
43CTF4	4	7/16"
50CTF4	4	1/2"
56CTF4	4	9/16"
62CTF4	4	5/8"
68CTF4	4	11/16"
75CTF4	4	3/4"
87CTF4	4	7/8"
100CTF4	4	1"
112CTF4	4	1 1/8"
125CTF4	4	1 1/4"
137CTF4	4	1 3/8"
150CTF4	4	1 1/2"
.....	6	1 1/8"
.....	6	1 1/4"
.....	6	1 3/8"
.....	6	1 1/2"

**WALTON COMPANY**

**Pipe Tap Extractors**



Designed to fit pipe taps. Sizes and styles not listed can be furnished on special order.

No.	No. Flutes Extractors	Tap Size In.
.....	4	1/8
.....	4	1/4
.....	4	3/8
.....	4	1/2
12RTEP	5	1/8
25RTEP	5	1/4
37RTEP	5	3/8
50RTEP	5	1/2
75RTEP	5	3/4
100RTEP	5	1
.....	5	1/8
.....	5	1/4
.....	5	3/8
.....	5	1/2
.....	5	3/8
.....	5	1/2
.....	5	3/4
.....	5	1

**Extra Fingers**



6863 Commerce Drive  
Next To I-80  
Hubbard, Ohio 44425

Phone: (330) 534-8171  
Fax: (330) 534-8179  
Toll Free: (800) 533-8171

**WALTON COMPANY**

**Tap Extensions**  
Style A - For Hand Tapping Only



For places where it is difficult to turn a tap wrench. Use singly or in combination. Fit all standard taps from No. 10-3/16 to 1" inclusive. Heat-treated special alloy steel. Square openings to conform to size standard of leading tap manufacturers. Each set contains two 5"L extensions.

- No. 10NTEA
- 25NTEA
- 31NTEA
- 37NTEA
- .....
- 43NTEA
- 50NTEA
- 62NTEA
- 75NTEA
- 87NTEA
- 100NTEA

- Tap Size In. 3/16
- 1/4
- 5/16
- 3/8
- 3/8
- 7/16
- 1/2
- 5/8
- 3/4
- 7/8
- 1

**WALTON COMPANY**

**Tap Extensions**  
Style B - For Pipe Taps



5 extensions which fit 6 different sizes of pipe taps for pipe 1/16" through 1/2".

- No. ....
- .....
- .....
- .....
- .....
- .....

- Size In. 1/16, 1/8
- 1/8
- 1/4
- 3/8
- 1/2

**MAGNA®**  
**Screw Extractors**  
Spiral Flute



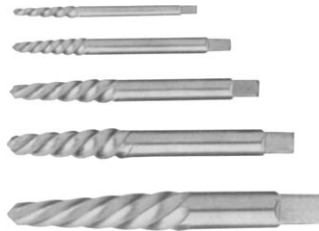
Heat-treated tool steel construction. Marked with proper drill size. For removing screws, pipes, bolts, and studs. Meet government specifications GGG-E936B. Boxed.

No.	Extr. No.	Dia. In.	For Screw Dia. In.	For Pipe Dia. In.	For Drill Size In.
/54660551	1	1/8-.060	3/32 to 5/32	...	5/64
/54660552	2	3/16-.080	5/32 to 7/32	...	7/64
/54660553	3	1/4, 1/8	7/32 to 9/32	...	5/32
/54660554	4	5/16, 3/16	9/32 to 3/8	...	1/4

No.	Extr. No.	Dia. In.	For Screw Dia. In.	For Pipe Dia. In.	For Drill Size In.
/54660555	5	7/16, 1/4	3/8 to 5/8	1/8, 1/4	17/64
/54660556	6	5/8, 3/8	5/8 to 7/8	3/8	13/32
/54660557	7	7/8, 19/32	7/8 to 1 1/8	1/2	17/32
/54660558	8	1 1/32, 3/4	1 1/8 to 1 3/8	3/4	13/16
/54660559	9	1 1/32, 1	1 3/8 & up	1	1 1/8

**MAGNA®**

**Spiral Screw Extractor Sets**



Contain extractor numbers 1, 2, 3, 4 and 5. Include vinyl pouch.

No.	Desc.	Pkg. Qty.
/54660020	5-Pc.	1

**WALTON COMPANY**  
**Pipe, Stud & Screw Extractors**



Designed for strength, durability and easy handling. For removing broken pipe and studs. For machine shops, industrial plants, rail and bus lines, and places where machine maintenance is important in operation. 4-pt. grip assures strong bite. Work with a shallow grip to lessen expansion and jamming. Pull rather than ream. Release instantly from bite after job is completed. Heat-treated steel. Rust-resistant. Black oxide finish. Available in 4 standard sets packed in durable metal case.

**Extractors**

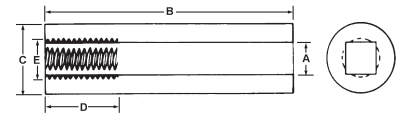
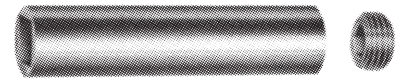
No.	Extr. No.	For Pipe In.	For Stud/Screw In.
/54650001	1	1/8	3/8
/54650002	2	1/4	1/2
/54650003	3	3/8	5/8 or 3/4
/54650004	4	1/2	...
/54650010	10	...	7/8 or 1
/54650005	5	3/4	1 1/8 or 1/4
/54650006	6	1	1 1/2 or 1 3/4
/54650007	7	1 1/4	2
/54650008	8	1 1/2	2 1/4 or 2 1/2
/54650009	9	2	3 or 3 1/2

**Sets**

No.	Cont. Extractors	Wt. Lbs.
/54650205	1-5	2 1/4
/54650206	1-6	2 3/4
/54650207	1-6, 10	3 1/4
/54650210	1-10*	13 1/4

\*Contains 1 ea. of all 10 sizes.

**SQUARE-HOLED SLEEVES**



Dim., In.

Round sleeve with square hole broaded through center. Made of mild machine steel. Can be supplied with .015" grinding stock on CD.

**Sleeves - Tapped**

No.	Tool Bit Size In.	A In.	B In.	C In.	D In.	E In.
...12	1/8	.1280	3/4	.2187	1/4	10-32
...18	3/16	.1915	1 1/2	.3125	7/16	1/4x28
...25	1/4	.2550	2	.4375	1/2	5/16x27
...31	5/16	.3175	2 1/4	.5000	9/16	3/8x24
...37	3/8	.3800	2 1/2	.5937	5/8	1/2x20
...43	7/16	.4425	2 5/8	.6875	5/8	1/2x20
...50	1/2	.5050	2 3/4	.7812	5/8	5/8x18
...62	5/8	.6300	3 1/4	.9375	1	3/4x16
...75	3/4	.7550	4	1.1250	1 1/4	1x14
...87	7/8	.8800	4	1.3125	1	1x14
...100	1	1.0080	5	1.5000	1 1/2	1 1/8x12
...125	1 1/4	1.2600	5	2.0000	1 1/2	1 1/8x12

**Sleeves - w/o Thread**

No.	Tool Bit Size In.	A In.	B In.	C In.*
...P-12	1/8	.1280	3/4	.2187
...P-18	3/16	.1915	1 1/2	.3125
...P-25	1/4	.2550	2	.4375
...P-31	5/16	.3175	2 1/4	.5000
...P-37	3/8	.3800	2 1/2	.5937
...P-43	7/16	.4425	2 5/8	.6875
...P-50	1/2	.5050	2 3/4	.7812
...P-62	5/8	.6300	3 1/4	.9375
...P-75	3/4	.7550	4	1.1250
...P-87	7/8	.8800	4	1.3125
...P-100	1	1.0080	5	1.5000
...P-125	1 1/4	1.2600	5	2.0000

\*Maximum .0005" oversize tolerance.

**PRECISION GROUND TOOL BITS**

**High Speed Steel - Square & Rectangular**

Made of a premium high speed steel—a fine grain molybdenum-tungsten-vanadium type w/no cobalt content; results in an excellent balance of wear resistance, toughness and red hardness.

Continued on next page

Continued from previous page

No.	Size In.	Lgth. In.	Pkg. Qty.
<b>Square Tool Bits - Beveled Ends*</b>			
12RTBHU	1/8	2 1/2	12
18RTBHU	3/16	2 1/2	12
25RTBHU	1/4	2 1/2	12
31RTBHU	5/16	2 1/2	12
37RTBHU	3/8	3	12
43RTBHU	7/16	3 1/2	6
50RTBHU	1/2	4	6
62RTBHU	5/8	4 1/2	2
75RTBHU	3/4	5	2
87RTBHU	7/8	6	2
100RTBHU	1	7	1

No.	Size In.	Lgth. In.	Pkg. Qty.
<b>Rectangular Tool Bits - Square Ends</b>			
/670011	1/4x3/8	3	12
.....	1/4x1/2	4	12
.....	1/4x5/8	4 1/2	6
.....	1/4x3/4	5	6
/670020	5/16x1/2	4	6
.....	5/16x5/8	4	6
.....	5/16x3/4	5	6
.....	3/8x1/2	4	6
.....	3/8x5/8	4 1/2	6
.....	3/8x3/4	5	4
.....	1/2x5/8	4 1/2	3
.....	1/2x3/4	5	3
.....	1/2x1	7	2
.....	1/2x1 1/2	7	2
.....	5/8x3/4	5	2
.....	5/8x7/8	6	2
.....	5/8x1	7	2
.....	3/4x1	7	2
.....	3/4x1 1/2	7	1

\*Sharp corners slightly beveled 15° for tight fit in all holders.

**PRECISION GROUND TOOL BITS**

**High Speed Steel Square & Rectangular**

Import

Made of a premium high speed steel—a fine grain molybdenum-tungsten-vanadium type w/no cobalt content; results in an excellent balance of wear resistance, toughness and red hardness.

No.	Size In.	Lgth. In.	Box Qty.
<b>Square Tool Bits - Ends Beveled 15°*</b>			
12RTBHI	1/8	2 1/2	12
18RTBHI	3/16	2 1/2	12
25RTBHI	1/4	2 1/2	12
31RTBHI	5/16	2 1/2	12
33RTBHI	3/8	3	12
43RTBHI	7/16	3 1/2	6
50RTBHI	1/2	4	6
62RTBHI	5/8	4 1/2	2
75RTBHI	3/4	5	2
87RTBHI	7/8	6	2
100RTBHI	1	7	1

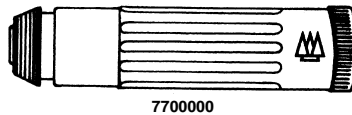
No.	Size In.	Lgth. In.	Box Qty.
<b>Rectangular Tool Bits - Square Ends</b>			
.....	1/4x3/8	3	12
.....	1/4x1/2	4	12
.....	1/4x5/8	4 1/2	6
.....	1/4x3/4	5	6
.....	5/16x1/2	4	6
.....	5/16x5/8	4	6
.....	5/16x3/4	5	6
.....	3/8x1/2	4	6
.....	3/8x5/8	4 1/2	6
.....	3/8x3/4	5	4
.....	1/2x5/8	4 1/2	3
.....	1/2x3/4	5	3
.....	1/2x1	7	2

No.	Size In.	Lgth. In.	Box Qty.
.....	1/2x1 1/2	7	2
.....	5/8x3/4	5	2
.....	5/8x7/8	6	2
.....	5/8x1	7	2
.....	3/4x1	7	2
.....	3/4x1 1/2	7	1

\*Sharp corners slightly beveled for tight fit in all holders.

**HAND DEBURRING TOOLS**

**Set B - HSS**



**No. 7700010.** Basic blade for steel and aluminum. Nose rounded for safety.

**No. 7700015.** Solid carbide.

**No. 7700011.** With diamond grit. Breaks corners in hardened steel, carbide, glass, plastics, etc.

**No. 7700012.** For plastics.

**No. 7700020.** For brass and cast iron. Rotate clockwise and counterclockwise.

**No. 7700025.** Solid carbide. Rotate clockwise and counterclockwise.

**No. 7700030.** Removes external and internal burrs simultaneously from holes drilled into tubing and sheet metal.

**No. 7700050.** Scriber, carbide tipped. Can be reground many times. Pull out to remove from holder.

**No. 7700060.** Internal deburring blade. For use in inaccessible locations.

**No. 7700070.** Carbide tipped deburring blade for sheet metal up to 3 mm (1/8") thickness.

**No. 7700500.** Blade holder; holds blades marked with B prefix. To insert or release blades, press sleeve in direction of arrow. Blades B10 and B20 can be inserted longitudinally or radially.

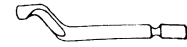
**No. 7700000.** Universal handle for Shaviv tools. To release, press tapered collar toward handle toward handle. Hollow for storage of spare blades.

No.	Item No.	Model No.
/85922220	7700010	B10
...7700015	7700015	B10C
...7700011	7700011	B10D
...7700012	7700012	B12
/85922223	7700020	B20
...7700025	7700025	B20C
...7700030	7700030	B30
...7700050	7700050	B50
...7700060	7700060	B60

No.	Item No.	Model No.
...7700070	7700070	B70
...7700500	7700500	Blade Holder
.....	7700000	B

**HAND DEBURRING TOOLS**

**Set E**



Basic blade. For steel and aluminum.

No.	Desc.
/85922025	Basic Blade

**SIMONDS®  
Machinists' Files  
Aluminum**



**Flat.** For use on aluminum and other soft metals. Eliminate clogging. Double cut file tapers toward point for detail work.

**Half Round.** Shape enables filing concave surfaces and round out holes. One flat side. Taper toward point for detail work.

No.	Size In.	Pkg. Qty.
<b>Flat</b>		
/75073-27450	6x9/16x9/32	12
/75073-27500	8x25/32x7/32	12
/75073-27550	10x31/32x1/4	12
/75073-27600	12x15/32x9/32	6
<b>Half Round</b>		
/75073-37300	6x19/32x9/32	12
/75073-37350	8x3/4x7/32	12
/75073-37400	10x15/16x9/32	12
/75073-37450	12x11/8x11/32	6

**SIMONDS®**

**Files  
Red Tang - Flat**



For factory, machine shop and garage. General purpose. Used by all mechanics for rapid stock removal. Double cut, tapers in width toward point. Cut edges.

No.	Double Cut	Size In.
/75073-22700	B	4x15/32x9/32
/75073-22750	2	4x15/32x9/32
/75073-22800	S	4x15/32x9/32
/75073-22950	B	6x5/8x9/32
/75073-23000	2	6x5/8x9/32
/75073-23050	S	6x5/8x9/32
/75073-23200	B	8x25/32x7/32
/75073-23250	2	8x25/32x7/32
/75073-23300	S	8x25/32x7/32
/75073-23400	B	10x31/32x1/4
/75073-23450	2	10x31/32x1/4
/75073-23500	S	10x31/32x1/4
/75073-23600	B	12x15/32x9/32
/75073-23650	2	12x15/32x9/32
/75073-23700	S	12x15/32x9/32
/75073-23800	B	14x111/32x9/16
/75073-23850	2	14x111/32x9/16
/75073-23900	S	14x111/32x9/16
/75073-23950	B	16x117/32x11/32

Note: B=Bastard Cut; 2=Second Cut; S=Smooth Cut.

**SIMONDS®**

**Hand Files  
Red Tang**



Has same cross-sectional dimensions as flat file but blunt in shape (no taper). Double cut, one safe (uncut) edge permits filing one surface without damaging adjoining one.

No.	Double Cut	Size In.
/75073-29600	B	6x <sup>9</sup> / <sub>16</sub> x <sup>9</sup> / <sub>32</sub>
/75073-29650	2	6x <sup>5</sup> / <sub>8</sub> x <sup>9</sup> / <sub>32</sub>
/75073-29700	S	6x <sup>9</sup> / <sub>16</sub> x <sup>9</sup> / <sub>32</sub>
/75073-29750	B	8x <sup>29</sup> / <sub>32</sub> x <sup>1</sup> / <sub>32</sub>
/75073-29800	2	8x <sup>25</sup> / <sub>32</sub> x <sup>1</sup> / <sub>32</sub>
/75073-29850	S	8x <sup>29</sup> / <sub>32</sub> x <sup>1</sup> / <sub>32</sub>
/75073-29900	B	10x <sup>31</sup> / <sub>32</sub> x <sup>1</sup> / <sub>4</sub>
/75073-29950	2	10x <sup>31</sup> / <sub>32</sub> x <sup>1</sup> / <sub>4</sub>
/75073-30000	S	10x <sup>31</sup> / <sub>32</sub> x <sup>1</sup> / <sub>4</sub>
/75073-30050	B	12x1 <sup>9</sup> / <sub>32</sub> x <sup>9</sup> / <sub>32</sub>
/75073-30100	2	12x1 <sup>5</sup> / <sub>32</sub> x <sup>9</sup> / <sub>32</sub>
/75073-30150	S	12x1 <sup>5</sup> / <sub>32</sub> x <sup>9</sup> / <sub>32</sub>

Note: B=Bastard Cut; S=Second Cut; S=Smooth Cut.

**SIMONDS®**

**Files  
Red Tang-Half Round**



For filing out concave surfaces and crevices and for rounding out holes. Improved spiral cut enables them to remove metal rapidly and leave a smooth finish.

No.	Double Cut	Size In.
/75073-31500	B	4x <sup>7</sup> / <sub>16</sub> x <sup>1</sup> / <sub>8</sub>
/75073-31550	2	4x <sup>7</sup> / <sub>16</sub> x <sup>1</sup> / <sub>8</sub>
/75073-31600	S	4x <sup>7</sup> / <sub>16</sub> x <sup>1</sup> / <sub>8</sub>
/75073-31700	B	6x <sup>19</sup> / <sub>32</sub> x <sup>9</sup> / <sub>32</sub>
/75073-31750	2	6x <sup>19</sup> / <sub>32</sub> x <sup>9</sup> / <sub>32</sub>
/75073-31800	S	6x <sup>19</sup> / <sub>32</sub> x <sup>9</sup> / <sub>32</sub>
/75073-31900	B	8x <sup>3</sup> / <sub>4</sub> x <sup>1</sup> / <sub>32</sub>
/75073-31950	2	8x <sup>3</sup> / <sub>4</sub> x <sup>1</sup> / <sub>32</sub>
/75073-32000	S	8x <sup>3</sup> / <sub>4</sub> x <sup>1</sup> / <sub>32</sub>
/75073-32100	B	10x <sup>15</sup> / <sub>16</sub> x <sup>9</sup> / <sub>32</sub>
/75073-32150	2	10x <sup>15</sup> / <sub>16</sub> x <sup>9</sup> / <sub>32</sub>
/75073-32200	S	10x <sup>15</sup> / <sub>16</sub> x <sup>9</sup> / <sub>32</sub>
/75073-32300	B	12x1 <sup>1</sup> / <sub>8</sub> x <sup>11</sup> / <sub>32</sub>
/75073-32350	2	12x1 <sup>1</sup> / <sub>8</sub> x <sup>11</sup> / <sub>32</sub>
/75073-32400	S	12x1 <sup>1</sup> / <sub>8</sub> x <sup>11</sup> / <sub>32</sub>
/75073-32500	B	14x1 <sup>9</sup> / <sub>32</sub> x <sup>13</sup> / <sub>32</sub>
/75073-32550	2	14x1 <sup>9</sup> / <sub>32</sub> x <sup>13</sup> / <sub>32</sub>
/75073-32600	S	14x1 <sup>9</sup> / <sub>32</sub> x <sup>13</sup> / <sub>32</sub>
/75073-32700	B	16x1 <sup>1</sup> / <sub>2</sub> x <sup>19</sup> / <sub>32</sub>

**SIMONDS®**

**Knife Files  
Red Tang - Double Cut**



Shaped like knife blade. Use on slots and keyways and for acute angle work in die-making. Sides double cut. Thin edge cut, but back safe (uncut). 12/box.

No.	Double Cut	Size In.
/75073-49850	B	4x <sup>15</sup> / <sub>32</sub> x <sup>7</sup> / <sub>64</sub>
/75073-49900	2	4x <sup>15</sup> / <sub>32</sub> x <sup>7</sup> / <sub>64</sub>
/75073-49950	S	4x <sup>15</sup> / <sub>32</sub> x <sup>7</sup> / <sub>64</sub>

No.	Double Cut	Size In.
/75073-50000	B	6x <sup>21</sup> / <sub>32</sub> x <sup>9</sup> / <sub>32</sub>
/75073-50050	2	6x <sup>21</sup> / <sub>32</sub> x <sup>9</sup> / <sub>32</sub>
/75073-50100	S	6x <sup>21</sup> / <sub>32</sub> x <sup>9</sup> / <sub>32</sub>
/75073-50150	B	8x <sup>27</sup> / <sub>32</sub> x <sup>9</sup> / <sub>16</sub>
/75073-50200	2	8x <sup>27</sup> / <sub>32</sub> x <sup>9</sup> / <sub>16</sub>
/75073-50250	S	8x <sup>27</sup> / <sub>32</sub> x <sup>9</sup> / <sub>16</sub>
/75073-50300	B	10x1 <sup>1</sup> / <sub>32</sub> x <sup>1</sup> / <sub>4</sub>
/75073-50350	2	10x1 <sup>1</sup> / <sub>32</sub> x <sup>1</sup> / <sub>4</sub>
/75073-50400	S	10x1 <sup>1</sup> / <sub>32</sub> x <sup>1</sup> / <sub>4</sub>

Note: B=Bastard Cut; 2=Second Cut; S=Smooth Cut

**SIMONDS®  
Machinists' Files  
Long Angle Lathe**



Use on soft or hard metals. Teeth cut on "long angle" and both edges safe (uncut) to prevent damage along shoulder. Taper in width toward point.

No.	Size In.
/75073-25550	10x <sup>31</sup> / <sub>32</sub> x <sup>1</sup> / <sub>4</sub>
/75073-25600	12x1 <sup>9</sup> / <sub>32</sub> x <sup>9</sup> / <sub>32</sub>
/75073-25650	14x1 <sup>11</sup> / <sub>32</sub> x <sup>9</sup> / <sub>32</sub>

**SIMONDS®  
Machinists' Files  
Multi-Kut® - Flat**



Two sets of chip breakers form diamond pattern. Coarse teeth remove metal faster while chip breakers leave smooth finish. Taper toward point for detail work.

No.	Lgth. In.	Wdth. In.	Thick. In.
/75073-24300	8	<sup>29</sup> / <sub>32</sub>	<sup>7</sup> / <sub>32</sub>
/75073-24350	10	<sup>31</sup> / <sub>32</sub>	<sup>1</sup> / <sub>4</sub>
/75073-24400	12	<sup>15</sup> / <sub>32</sub>	<sup>9</sup> / <sub>32</sub>
/75073-24450	14	1 <sup>11</sup> / <sub>32</sub>	<sup>5</sup> / <sub>16</sub>

**SIMONDS®  
Machinists' Files  
Multi-Kut® - Half Round**



Flat side has two sets of chip breakers in diamond pattern. Coarse teeth remove metal faster; chip breakers leave smooth finish. "Spiral" cut on half-round side. Combination offers rapid stock removal and smooth finishes on concave or flat surfaces.

No.	Lgth. In.	Wdth. In.	Thick. In.
...73-32800	8	<sup>3</sup> / <sub>4</sub>	<sup>7</sup> / <sub>32</sub>
...73-32850	10	<sup>15</sup> / <sub>16</sub>	<sup>9</sup> / <sub>32</sub>
...73-32900	12	1 <sup>1</sup> / <sub>8</sub>	<sup>11</sup> / <sub>32</sub>

**SIMONDS®  
Machinists' Files  
Pillar**



For filing slots and keyways. One safe (uncut) edge; double-cut with "Wavy Tooth" design. 10/box.

No.	Size In.	Dbl. Cut
...73-46600	6x <sup>7</sup> / <sub>16</sub> x <sup>7</sup> / <sub>32</sub>	B
...73-46650	6x <sup>7</sup> / <sub>16</sub> x <sup>7</sup> / <sub>32</sub>	2
...73-46800	8x <sup>9</sup> / <sub>16</sub> x <sup>9</sup> / <sub>32</sub>	B
...73-46850	8x <sup>9</sup> / <sub>16</sub> x <sup>9</sup> / <sub>32</sub>	2
...73-47000	10x <sup>21</sup> / <sub>32</sub> x <sup>11</sup> / <sub>32</sub>	B

Note: B=Bastard Cut, 2=Second Cut.

**SIMONDS®  
Files  
Red Tang - Round**



For enlarging circular holes or rounded grooves. Double cut. Taper toward point in width and thickness.

No.	Double Cut	Size In.
/75073-39300	B	4x <sup>5</sup> / <sub>32</sub>
/75073-39350	2	4x <sup>5</sup> / <sub>32</sub>
/75073-39400	S	4x <sup>5</sup> / <sub>32</sub>
/75073-39600	B	6x <sup>7</sup> / <sub>32</sub>
/75073-39650	2	6x <sup>7</sup> / <sub>32</sub>
/75073-39700	S	6x <sup>7</sup> / <sub>32</sub>
/75073-39850	B	8x <sup>9</sup> / <sub>16</sub>
/75073-39900	2	8x <sup>9</sup> / <sub>16</sub>
/75073-39950	S	8x <sup>9</sup> / <sub>16</sub>
/75073-40050	B	10x <sup>3</sup> / <sub>8</sub>
/75073-40100	2	10x <sup>3</sup> / <sub>8</sub>
/75073-40150	S	10x <sup>3</sup> / <sub>8</sub>
/75073-40250	B	12x <sup>1</sup> / <sub>2</sub>
/75073-40300	2	12x <sup>1</sup> / <sub>2</sub>
/75073-40350	S	12x <sup>1</sup> / <sub>2</sub>
/75073-40450	B	14x <sup>9</sup> / <sub>8</sub>

**SIMONDS®  
Files  
Red Tang - Square**



For use on slots, keyways, splines, rectangular as well as square holes and for surface work. Double cut. Taper toward point in width and thickness.

No.	Double Cut*	Size In.
/75073-42500	B	4x <sup>9</sup> / <sub>32</sub>
/75073-42550	2	4x <sup>9</sup> / <sub>32</sub>
/75073-42600	S	4x <sup>9</sup> / <sub>32</sub>
/75073-42800	B	6x <sup>7</sup> / <sub>32</sub>
/75073-42850	2	6x <sup>7</sup> / <sub>32</sub>
/75073-42900	S	6x <sup>7</sup> / <sub>32</sub>
/75073-43000	B	8x <sup>9</sup> / <sub>16</sub>
/75073-43050	2	8x <sup>9</sup> / <sub>16</sub>
/75073-43100	S	8x <sup>9</sup> / <sub>16</sub>
/75073-43200	B	10x <sup>3</sup> / <sub>8</sub>
/75073-43250	2	10x <sup>3</sup> / <sub>8</sub>
/75073-43300	S	10x <sup>3</sup> / <sub>8</sub>
/75073-43400	B	12x <sup>1</sup> / <sub>2</sub>
...73-43450	2	12x <sup>1</sup> / <sub>2</sub>
...73-43500	S	12x <sup>1</sup> / <sub>2</sub>
/75073-43600	B	14x <sup>9</sup> / <sub>8</sub>

\*6/box; all others 12/box.

Note: B=Bastard Cut; 2=Second Cut; S=Smooth Cut.

**SIMONDS®**

**Files**  
Red Tang - 3-Square



Triangular. 60° angle between sides and taper toward point. Double cut, for cleaning out corners, filing internal angles inaccessible to rectangular shape files, and for filing annealed cutters and taps. Also used on flat surfaces. 12/box.

No.	Double Cut	Size In.
/75073-51650	B	6x1 <sup>15</sup> / <sub>32</sub>
/75073-51700	2	6x1 <sup>15</sup> / <sub>32</sub>
/75073-51750	S	6x1 <sup>15</sup> / <sub>32</sub>
/75073-51800	B	8x <sup>9</sup> / <sub>8</sub>
/75073-51850	2	8x <sup>9</sup> / <sub>8</sub>
/75073-51900	S	8x <sup>9</sup> / <sub>8</sub>
/75073-51950	B	10x <sup>3</sup> / <sub>4</sub>
/75073-52000	2	10x <sup>3</sup> / <sub>4</sub>
/75073-52050	S	10x <sup>3</sup> / <sub>4</sub>

Note: B=Bastard Cut, 2=Second Cut, S=Smooth Cut.

**SIMONDS®**

**Machinists' Files**  
Warding



For filing "wards" in keys and locks. Ideal for narrow spaces. Double cut with single cut edges. Taper toward point in width. "Wavy Tooth" design.

No.	Dbl. Cut*	Size In.
/75073-47900	B	4x1 <sup>15</sup> / <sub>32</sub> x <sup>3</sup> / <sub>64</sub>
/75073-47950	2	4x1 <sup>15</sup> / <sub>32</sub> x <sup>3</sup> / <sub>64</sub>
/75073-48000	S	4x1 <sup>15</sup> / <sub>32</sub> x <sup>3</sup> / <sub>64</sub>
/75073-48100	B	6x <sup>5</sup> / <sub>8</sub> x <sup>5</sup> / <sub>64</sub>
/75073-48150	2	6x <sup>5</sup> / <sub>8</sub> x <sup>5</sup> / <sub>64</sub>
/75073-48200	S	6x <sup>5</sup> / <sub>8</sub> x <sup>5</sup> / <sub>64</sub>
/75073-48250	B	8x <sup>25</sup> / <sub>32</sub> x <sup>3</sup> / <sub>32</sub>
/75073-48300	2	8x <sup>25</sup> / <sub>32</sub> x <sup>3</sup> / <sub>32</sub>
/75073-48350	S	8x <sup>25</sup> / <sub>32</sub> x <sup>3</sup> / <sub>32</sub>
...73-48400	B	10x1 <sup>15</sup> / <sub>16</sub> x1 <sup>1</sup> / <sub>8</sub>

\*B=Bastard Cut; 2=Second; S=Smooth Cut.

**SIMONDS®**

**Bearing & Machinists' Scrapers**  
Triangular



For hand finishing bearing surfaces, casing joints, and other metal seats.

**Bearing Scrapers w/Handles**

No.	Lgth. In.	Type
/75085-58350	3 <sup>1</sup> / <sub>4</sub>	Hollow Grnd.
...85-58400	3 <sup>1</sup> / <sub>4</sub>	Solid

**Machinists' Scrapers w/o Handles**

No.	Blade Lgth. In.	Thick. In.
...85-73144	5	1 <sup>3</sup> / <sub>32</sub>
...85-73145	6	1 <sup>5</sup> / <sub>32</sub>
...85-73147	5	9/32
...85-73148	6	1 <sup>1</sup> / <sub>32</sub>
...85-73234	8	1 <sup>5</sup> / <sub>32</sub>

Note: Order No. 106 file handles separately.

**SIMONDS®**

**Hobby Rasps**  
Red Tang



Tangleless. One flat, one rounded side. Half length of each side rasp punched; other half file cut.

No.	Cut	Size In.
...75-12008	Sp Comb	8x <sup>7</sup> / <sub>8</sub> x <sup>9</sup> / <sub>32</sub>
...75-12108	Sp Comb	10x1 <sup>1</sup> / <sub>16</sub> x1 <sup>1</sup> / <sub>32</sub>

**SIMONDS®**

**Horse Rasps**  
Red Tang



Horse Rasp (Half File)



Farrier Rasp

Plain or with tang. Choice of regular or "Race-Trak". Flat with rasp cut on one side and double cut on other side.

No.	Size In.
...75-10008	12x1 <sup>15</sup> / <sub>16</sub> x1 <sup>1</sup> / <sub>32</sub>
...75-10058	14x1 <sup>1</sup> / <sub>2</sub> x <sup>9</sup> / <sub>8</sub>

Horse Rasp (Half File)

"Farrier" Rasp

...75-056970	14x1 <sup>3</sup> / <sub>4</sub> x <sup>9</sup> / <sub>32</sub>
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"Race Trak" Plain

...75-10258	18x1 <sup>9</sup> / <sub>16</sub> x1 <sup>1</sup> / <sub>32</sub>
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**SIMONDS®**

**Wood Rasps**



Flat Wood Rasps - Single Cut



Half Round Wood Rasps - Single Cut



Half Round Cabinet Rasps - Single Cut



Half Round Cabinet File - Double Cut

No.	Lgth. In.	Wdth. In.	Thick. In.	Type
...75-10708	10	3 <sup>1</sup> / <sub>32</sub>	1 <sup>1</sup> / <sub>32</sub>	Bastard
...75-10808	12	1 <sup>5</sup> / <sub>32</sub>	1 <sup>3</sup> / <sub>32</sub>	Bastard
...75-10908	14	1 <sup>11</sup> / <sub>32</sub>	1 <sup>5</sup> / <sub>32</sub>	Bastard

**Half-Round Wood Rasp**

...75-11058	8	2 <sup>5</sup> / <sub>32</sub>	5/16	Bastard
...75-11158	10	3 <sup>1</sup> / <sub>32</sub>	3/8	Bastard
...75-11308	12	1 <sup>9</sup> / <sub>32</sub>	7/16	Bastard
...75-11408	14	1 <sup>11</sup> / <sub>32</sub>	1/2	Bastard

**Half-Round Cabinet Rasp**

...75-11708	10	1 <sup>1</sup> / <sub>8</sub>	9/32	Second
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**Half-Round Cabinet File**

...73-33950	10	1 <sup>1</sup> / <sub>8</sub>	7/32	...
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**FILE CLEANERS**

No. 10



Sharp steel bristles for general cleaning of file teeth.

No.	Lgth. In.	Wt. Lbs.	Pkg. Qty.
/754210	8 <sup>1</sup> / <sub>4</sub>	2	12

**COMBINATION FILE CARDS & BRUSHES**



Sharp steel bristle file card for general file teeth cleaning. Brush side especially for use on finer cut files, saws, drill bits. Length 9<sup>1</sup>/<sub>4</sub>".

No.	Wt. Lbs.	Pkg. Qty.
/754220	4 <sup>1</sup> / <sub>2</sub>	12

**FILE HANDLES**

Skroo-Zon®



Waxed white birch handle with case hardened, threaded steel insert to hold file tight. Zinc plated, heavy gauge steel ferrule.

No.	Model No.	Lgth. In.	Dia. In.	For Files In.
/754201	T1	3 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>16</sub>	Small
/754202	T2	3 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>16</sub>	4
/754203	T3	4	1 <sup>1</sup> / <sub>8</sub>	5
/754204	T4	4	1 <sup>1</sup> / <sub>8</sub>	6
/754205	T5	4 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>4</sub>	8
/754206	T6	4 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>4</sub>	10
/754207	T7	5	1 <sup>3</sup> / <sub>8</sub>	12
/754208	T8	5	1 <sup>3</sup> / <sub>8</sub>	14

**FILE HANDLES**

Long Ferrule



Waxed white birch wood with bright zinc plated heavy steel long ferrule.

- No. #1. For 3" to 6" files. Size 4<sup>1</sup>/<sub>2</sub>"x1<sup>3</sup>/<sub>16</sub>"x1<sup>3</sup>/<sub>4</sub>".
- No. #2. For 6" to 8" files. Size 4<sup>1</sup>/<sub>2</sub>"x1<sup>3</sup>/<sub>16</sub>"x2<sup>3</sup>/<sub>4</sub>".
- No. #3. For 8" to 12" files. Size 5<sup>1</sup>/<sub>2</sub>"x1<sup>1</sup>/<sub>16</sub>"x2<sup>3</sup>/<sub>4</sub>".
- No. #4. For 12" to 16" files. Size 5<sup>1</sup>/<sub>2</sub>"x1<sup>1</sup>/<sub>16</sub>"x2<sup>9</sup>/<sub>16</sub>".

No.	Model No.	Bore In.
/754001	#1	1/8
/754002	#2	1 <sup>1</sup> / <sub>16</sub>
/754003	#3	1/4
/754004	#4	5/16

**M. K. MORSE**  
**Hack Saw Blades**  
Bi-Metal - Hand



Feature bi-metal construction, tooth hardness Rc 65-67, vacuum heat treatment. Flexible, heat, wear and shatter resistant. Width 1/2" (12.7 mm). Thickness .025" (0.6 mm). Applications include pipe, tubing, solids, wood, plastic or any machinable metal; including conduit, stainless steel tubing, angle iron, copper tubing, structural materials, etc.

**Boxed.** 100 blades/box. 10 blades/taped bundle. 10 bundles/box.

No.	Blade Lgth.		Blade Lgth. mm
	In.	tpi	
	<b>Boxed</b>		
/772077	12	14	300
/772079	12	18	300
/772081	12	24	300
/772083	12	32	300
...HHB121418	12	14/18	300
...HHB122024	12	20/24	300
...HHB122632	12	25/32	300

**M.K. MORSE**  
**Hack Saw Frames**  
Lightweight - High Tension



Use for standard or flush cuts. Multiple pin locations allow standard or angled blade mounts. Locking screw stores blades or secures blade for jab sawing. Tension handle for extra torque and blade rigidity.

No.	Desc.
/772020	Hack Saw Frame

**MANUFACTURERS' CATALOGS**

We shall be glad to send manufacturers' catalogs and other available publications and data on request.

**M.K. MORSE**  
**Hack Saw Blades**  
Power

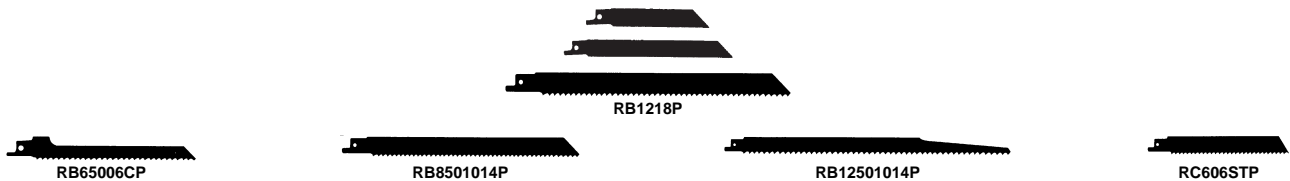


Bi-metal construction. Alloy back. 10/box.

No.	No. Teeth	Lgth. In.	Wdth. In.	Thick. In.
/772100	14	12	5/8	.032
/772101	18	12	5/8	.032
/772103	10	12	1	.050
/772104	14	12	1	.050
/772112	10	14	1	.050
/772116	14	14	1	.050
/772120	6	14	1 1/4	.062
/772124	10	14	1 1/4	.062
/772136	4	14	1 1/2	.075
/772140	6	14	1 1/2	.075
/772152	10	17	1	.050
/772156	14	17	1	.050
/772160	6	17	1 1/4	.062
/772164	10	17	1 1/4	.062
/772176	6	18	1 1/4	.062
/772180	10	18	1 1/4	.062
.....	4	18	1 1/2	.075
/772192	6	18	1 1/2	.075
/772208	4	18	1 3/4	.088
/772212	6	18	1 3/4	.088
/772224	4	21	1 3/4	.088
/772228	6	21	1 3/4	.088
/772256	4	24	2	.100

**Note:** When selecting tooth spacing, minimum of 3 teeth must be in contact with work surface at all times.

**M.K. MORSE**  
**Reciprocating Saw Blades**  
Bi-Metal



- No. RB418P.** Use on heavy metals up to 18 gauge and up to 1/8" thick conduit, pipe, channel and tubing.
- No. RB618P.** Use on heavy metals up to 18 gauge and up to 1/8" thick conduit, pipe, channel and tubing.
- No. RB424P.** Use on metal and galvanized pipe cutting under 18 gauge; also for trim and tubing.
- No. RB624P.** Use on metal and galvanized pipe cutting under 18 gauge; also for trim and tubing.
- No. RB610P.** Use on wood, nail-embedded wood, cast aluminum and nonferrous metals and composition plastic.
- No. RB1218P.** Use on heavy gauge metals 18 ga. to 1/8" thick conduit, pipe channels and tubing.
- No. RB818P.** Use on heavy gauge metals, conduit and tubing 18 ga. to 1/8".
- No. RB61014P.** Use for wood, nail-embedded wood, compositions, plastic, metal 1/8" and above.
- No. RB95006P.** Use for general rough-in, all woods, nail-embedded woods.
- No. RB121014P.** Use for general purpose, metal cutting, nail-embedded woods.
- No. RB65006CP.** Use on general rough-in scroll cuts, all woods, nail-embedded woods.
- No. RB8501014P.** For soil pipe.
- No. RB12501014P.** Use on general rough-in, all woods, nail-embedded woods.
- No. RC606STP.** Use on fast cutting nail-free wood and fiberboard.

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No.	Model No.	Lgth. In.	Wdth. In.	Thick. In.	tpi
/7720504	RB414P	4	3/4	.035	14
/7720506	RB418P	4	3/4	.035	18
/7720508	RB424P	4	3/4	.035	24
/772514	RB606PP	6	3/4	.035	6
/7720518	RB610P	6	3/4	.035	10
/7720524	RB614P	6	3/4	.035	14
/7720526	RB618P	6	3/4	.035	18
/7720554	RB1218P	12	3/4	.035	18
/772536	RB818P	8	3/4	.035	18
/7200512	RB65006CP	6	7/16	.050	6
/7720558	RB8501014P	8	3/4	.050	10/14
/7720558	RB12501014P	12	3/4	.050	10/14
/7720516	RC606STP	6	3/4	.050	6
/7720528	RB624P	6	3/4	.035	24
...RB61014B	RB61014B	6	3/4	.035	10/14
/7720556	RB121014P	12	3/4	.035	10/14
/772520	RB61014P	6	3/4	.035	10/14
/7720538	RB81014P	8	3/4	.035	10/14
...RB95006B	RB95006B	9	3/4	.050	6
...RB121014B	RB121014B	12	3/4	.035	10/14
/7720542	RB95006P	9	3/4	.05	6
/7720548	RB125006P	12	3/4	.035	6

Note: Other sizes and tooth styles available.

**M.K. MORSE**  
Saber/Jig Saw Blades  
Bi-Metal



SH2712P



SC410P

SC410RP



SC2720P

Bosch Shank

No. **SB3606P**. Use on wood, asbestos, fiber board and coarse cut. 5/pkg.

No. **SB3610P**. Use on wood, plywood and hardboard. 5/pkg.

No. **SB3614P**. Use on nonferrous metals, fiberglass, hard rubber and nail embedded wood. 5/pkg.

No. **SB2718P**. Use on metal, 18 gauge and under. 5/pkg.

No. **SB2724P**. Use on metal and nonferrous metal up to 1/8" thick. 5/pkg.

No.	Model No.	Lgth. In.	Wdth. In.	Thick. In.	tpi
/7720016	SB3606P	4	3/8	.035	6
/7720018	SB3610P	4	3/8	.035	10
/7720020	SB3614P	4	3/8	.035	14
/7720012	SB2718P	3	3/8	.035	18
/7720014	SB2724P	3	3/8	.035	24

**Bosch Shank**

/7720028	SB0406P	4	5/16	.040	6
/7720030	SB0408P	4	5/16	.035	8
/7720032	SB0410P	4	5/16	.035	10
/7720022	SB0314P	3	3/8	.035	14
/7720024	SB0318P	3	3/8	.035	18
/7720026	SB0324P	3	3/8	.035	24

Note: Other sizes and tooth styles available.

**High Speed Steel Blades.**

No. **SH2712P**. Use on ferrous metals 1/4" to 3/8" thick. Non-ferrous 1/8" to 1/4".

No. **SH2718P**. Use on ferrous metals 1/48" to 1/4" thick. Non-ferrous 1/16" to 1/8".

No. **SH2724P**. Use on ferrous metals 1/16" to 3/16" thick. Non-ferrous to 1/8".

No. **SH2732P**. Use on ferrous metals 1/32" to 1/8" thick. Non-ferrous to 1/8".

**High Speed Steel**

No.	Model No.	Lgth. In.	Wdth. In.	Thick. In.	tpi
/7720142	SH2712P	2 3/4	5/16	.032	12
/7720144	SH2718P	3	5/16	.032	18
/7720146	SH2724P	3	5/16	.032	24
/7720148	SH2732P	3	3/8	.035	32

**Carbon Blades.**

No. **SC410P**. Use on softwood, hardwood, plywood, chipboard, plastic up to 1" thick. Makes clean cuts.

No. **SC410RP**. Reverse tooth. Non-splitting cuts of laminates and chipboard. Clean cuts.

No. **SC2720P**. For scroll cutting wood, plywoods, etc. Super fine finish, ground, taper back.

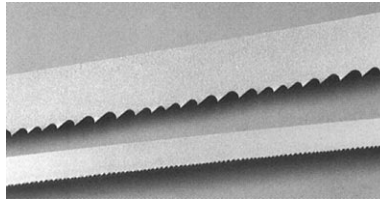
**Carbon**

No.	Model No.	Lgth. In.	Wdth. In.	Thick. In.	tpi
/7720120	SC410P	4	5/16	.05	10
/7720128	SC410RP	4	5/16	.050	10
/7720112	SC2720P	2 3/4	3/16	.040	20

There's just not enough space to list all of the material and services we can offer you.  
Let us know about your problems.



**M.K. MORSE**  
**Band Saw Blades**  
Bi-Metal - Matrix II - Information

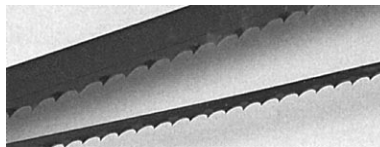


8% cobalt construction. For mild to moderate machinable materials. Cut solids, shapes, tubing and structural materials. Cut alloy steels, tool steels, stainless steels, air hardening die steels. Tooth hardness rated Rc 66-68. Alloy steel backer. Positive rake. Resist heat, wear, fatigue. Increased tooth penetration. Available in 100', 250' or 500' coils. Custom welded to length.

Wdth. In.	Thick. In.	Std. Tooth Raker Set tpi	Wavy Set tpi	Var. Pitch tpi	Var. Pitch Pos. Rake tpi	Hook Tooth tpi
1/4	.025	10, 14	...	10/14	...	6
3/8	.025	8, 10, 14	...	...	...	4
1/2	.020	10	14, 18 24	10/14, 14/18, 20/24	...	...
1/2	.025	6, 10 14, 18	...	6/10, 8/12, 10/14, 14/18	...	3, 4
5/8	.035	10, 14	...	5/8, 6/10, 10/14	...	...
3/4	.035	6, 8, 10, 12, 14	...	5/8, 6/10, 8/12, 10/14	4/6	3
1	.035	4, 6, 8, 10, 14	...	3/4, 4/6, 5/8, 6/10, 8/12, 10/14	3/4, 4/6	3
1 1/4	.042	4, 6	...	3/4, 4/6, 5/8, 6/10, 8/12	3/4, 4/6	2, 3
1 1/2	.050	...	...	2/3, 3/4, 4/6, 5/8	2/3, 3/4 4/6	...

Complete Information Available on Request.

**M.K. MORSE**  
**Band Saw Blades**  
Carbon - Hard Edge - Flexible Back - Information



General purpose. For use on light duty machines, tool rooms, maintenance areas. Cut mild steel, wood, plastic, cork, fiberglass, graphite, aluminum, brass, bronze, cast iron, copper, lead, zinc, nonferrous metals. One-piece construction. Tooth hardness Rc 64-67. Back hardness Rc 28-35. Fatigue, wear resistant. Available in 100', 250', or 500' coils. Custom welded to length.

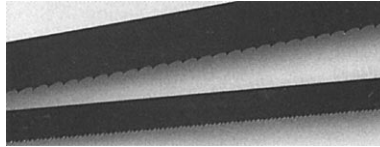
Wdth. In.	Thick. In.	Std. Tooth Raker Set tpi	Std. Tooth Wavy Set tpi	Skip Tooth tpi	Hook Tooth Raker tpi	Hook Tooth ETS tpi
3/16	.025	10, 14, 18, 24	...	4	...	...
1/4	.014	14, 18	24, 32	6	...	...
1/4	.020	...	...	...	4	4
1/4	.025	8, 10, 12, 14, 18, 24	32	4, 6	4, 6	4
3/8	.014	14	24, 32	6	...	...
3/8	.025	8, 10, 14, 18, 24	...	3, 4	3, 4, 6	3
1/2	.020	6, 8, 10	14, 18, 24	...	3	...
1/2	.025	6, 8, 10, 14, 18, 24	10, 14, 18, 24, 32	3, 4	3, 4, 6	3
5/8	.032	8, 10, 14, 18	10, 14	...	3, 4, 6	4
3/4	.032	6, 8, 10, 12, 14, 18	8, 10, 12, 14, 18	3, 4	2, 3, 4, 6	3
1	.035	6, 8, 10, 14	10, 14	2, 3	1.3, 2, 3, 4, 6	3
1	.042	...	...	...	1.3	...
1 1/4	.035	...	...	...	1.14, 1.3	...
1 1/4	.042	...	...	...	1, 1.14, 1.3	...
2	.035	...	...	...	1.3	...

Complete Information Available on Request.

**M.K. MORSE**

**Band Saw Blades**

Carbon - Hard Edge - Hard Back - Information



For light and medium duty applications. Cut cold rolled steel, carbon tool steel, annealed steel, solids, structurals, brass, bronze, cast iron, lead, zinc. One piece construction. Tooth hardness rated Rc 64-67. Back hardness rated Rc 42-48. Provide faster cutting rate and straighter cuts. Accept heavy feed pressure and blade tension. Available in 100', 250' or 500' coils.

Custom welded to length.

Wdth. In.	Thick. In.	Std. Tooth Raker Set tpi	Std. Tooth Wavy Set tpi	Skip Tooth tpi	Hook Tooth Raker tpi
3/16	.025	10, 14, 18	...	4	...
1/4	.025	10, 14, 18, 24	32	4, 6	4, 6
3/8	.025	8, 10, 14, 18	18	3, 4	3, 4, 6
1/2	.020	14, 24	...	...	...
1/2	.025	6, 10, 14, 18, 24	10, 14, 18, 24	3, 4	3, 4, 6
5/8	.032	8, 10, 14, 18	...	...	4, 6
3/4	.032	6, 8, 10, 12, 14, 18	8, 10, 12, 14, 18	3, 4	3, 6
1	.035	6, 8, 10, 14	10	3	2, 3, 4
1 1/4	.035	...	...	...	1.3
1 1/4	.042	...	...	...	1.3

Complete Information Available on Request.

**M.K. MORSE**

**Portable Band Saw Blades  
Bi-Metal**



Fit all standard portable band saw machines. For pipe, tubing, solids and any machinable metal, including conduit, angle iron, structurals, rebar and stainless steel tubing.

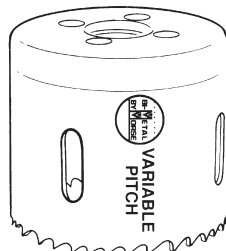
Bulk. 100 blades/carton.

Box. 3 blades/box, 20 boxes/carton.

No.	Lgth. In.	Wdth. In.	Ht. In.	tpi	Desc.
<b>Boxed - Variable Pitch</b>					
/771ZWEP441014	44 7/8	1/2	.020	10/14	Wavy
...ZWEP441418	44 7/8	1/2	.020	14/18	Wavy
...ZWEP442024	44 7/8	1/2	.020	20/24	Wavy
...ZWEP531014	53 3/4	1/2	.020	10/14	Wavy
<b>Boxed - Standard Pitch</b>					
...ZWEP4410R	44 7/8	1/2	.020	10	Raker
...ZWEP4414W	44 7/8	1/2	.020	14	Wavy
/771ZWEP4418-W	44 7/8	1/2	.020	18	Wavy
...ZWEP4424W	44 7/8	1/2	.020	24	Wavy
...ZWEP5310R	53 3/4	1/2	.020	10	Raker
...ZWEP5314W	53 3/4	1/2	.020	14	Wavy
...ZWEP5318W	53 3/4	1/2	.020	18	Wavy
...ZWEP5324W	53 3/4	1/2	.020	24	Wavy
<b>Bulk - Variable Pitch</b>					
...ZWEP441014B	44 7/8	1/2	.020	10/14	Wavy
...ZWEP441418B	44 7/8	1/2	.020	14/18	Wavy
...ZWEP442024B	44 7/8	1/2	.020	20/24	Wavy
...ZWEP531014B	53 3/4	1/2	.020	10/14	Wavy

No.	Lgth. In.	Wdth. In.	Ht. In.	tpi	Desc.
<b>Bulk - Standard Pitch</b>					
...ZWEP4410RB	44 7/8	1/2	.020	10	Raker
...ZWEP4414WB	44 7/8	1/2	.020	14	Wavy
...ZWEP4418WB	44 7/8	1/2	.020	18	Wavy
...ZWEP4424WB	44 7/8	1/2	.020	24	Wavy
...ZWEP5310RB	53 3/4	1/2	.020	10	Raker
...ZWEP5314WB	53 3/4	1/2	.020	14	Wavy
...ZWEP5318WB	53 3/4	1/2	.020	18	Wavy
...ZWEP5324WB	53 3/4	1/2	.020	24	Wavy

**M. K. MORSE  
Hole Saws  
"AV" - Bi-Metal**



AV-type, separate arbor. Has high speed M3 cutting edge with varying tooth sets and gullet depths, 4-6 teeth/inch. When ordering, specify fractional or metric.

No.	Dia. In.	Pipe Tap Size In.	Pipe Ent. Size In.	Speed Mild Steel rpm	Speed Cast Iron rpm
<b>Arbor Nos. M24, M24K, M34, M44 &amp; M44K</b>					
/770056	9/16	14	...	580	400
/770062	5/8	16	...	550	365
.....	...	16	...	550	365

No.	Dia. In.	mm	Pipe Tap Size In.	Pipe Ent. Size In.	Speed Mild Steel rpm	Speed Cast Iron rpm
/770068	1 1/16	17	...	...	500	330
/770075	3/4	19	...	3/8	460	300
.....	...	20	...	...	460	300
/770081	13/16	21	...	...	425	280
/770087	7/8	22	3/4	1/2	390	260
/770093	15/16	24	...	...	370	245
.....	...	25	...	...	350	235
/770100	1	25	...	...	350	235
/770106	1 1/16	27	...	...	325	215
/770112	1 1/8	29	1	3/4	300	200
.....	...	30	...	...	285	190
/770118	1 3/16	30	...	...	285	190
.....	...	32	...	...	275	180
.....	1 3/8	35	...	1	250	165
.....	1 1/2	38	1 1/4	...	230	150
<b>Arbor Nos. M35P, M45, M45P, M46PS, M55P, or M44K</b>						
/770125	1 1/4	32	...	...	275	180
.....	...	32	...	...	275	180
/770131	1 5/16	33	...	...	260	175
/770137	1 3/8	35	...	1	250	165
.....	...	35	...	...	250	165
/770143	1 7/16	37	...	...	240	160
/770150	1 1/2	38	1 1/4	...	230	150
/770156	1 9/16	40	...	...	220	145
.....	...	40	...	...	220	145
/770162	1 5/8	41	...	...	210	140
/770168	1 11/16	43	...	...	205	135
/770175	1 3/4	44	1 1/2	1 1/4	195	130
.....	...	45	...	...	190	125
/770181	1 13/16	46	...	...	190	125
/770187	1 7/8	48	...	...	180	120
.....	...	50	...	...	170	115
/770200	2	51	...	1 1/2	170	115
/770206	2 1/16	52	...	...	165	110
/770212	2 1/8	54	...	...	160	105
.....	...	55	...	...	150	100
/770225	2 1/4	57	2	...	150	100
.....	...	59	...	...	145	100
/770237	2 3/8	60	...	...	140	95

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No.	Dia. In.	mm	Pipe Tap Size In.	Pipe Ent. Size In.	Speed Mild Steel rpm	Speed Cast Iron rpm
<b>Arbor Nos. M45P, M46PS, M55P, or M44K</b>						
/770250	2 1/2	64	...	2	135	90
/770252	2 9/16	65	...	...	130	85
/770262	2 3/8	67	2 1/2	...	130	85
.....	...	68	...	...	130	85
.....	...	68.5	...	...	130	85
/770275	2 3/4	70	...	...	125	80
/770287	2 7/8	73	...	...	120	80
.....	...	75	...	...	115	75
/770300	3	76	2 1/2	...	115	75
/770312	3 1/8	79	...	...	110	70
/770325	3 1/4	83	3	...	105	70
/770327	3 3/8	86	...	...	100	65
/770350	3 1/2	89	...	...	95	65
/770362	3 5/8	92	...	3	95	60
/770375	3 3/4	95	3 1/2	...	90	60
/770387	3 7/8	98	...	...	90	60
.....	...	100	...	...	85	55
/770400	4	102	...	...	85	55
/770412	4 1/8	105	3 1/2	...	80	55
/770425	4 1/4	108	...	...	80	55
/770427	4 3/8	111	...	...	80	50
/770450	4 1/2	114	...	4	75	50
/770454	4 3/4	121	4 1/2	...	75	50
/770500	5	127	...	...	65	45
/770550	5 1/2	140	...	...	60	40
/770554	5 3/4	146	...	...	55	35
/770600	6	152	...	...	55	35

**M. K. MORSE**  
Specialty Hole Saws  
"AT" Carbide Tipped



Tungsten carbide tooth tips, ground and set teeth, 3 tpi. Highest wear resistance. Better chip clearance. Cut materials too abrasive for bi-metal, such as fiberglass, particle board, asbestos board, cast iron and formica. Separate arbor required.

No.	Dia. In.
/770075C	3/4
/770081C	13/16
/770087C	7/8
/770093C	15/16
/770100C	1
/770106C	1 1/16
/770112C	1 1/8
/770118C	1 3/16
/770125C	1 1/4
/770131C	1 5/16
/770137C	1 3/8
/770143C	1 7/16
/770150C	1 1/2
/770156C	1 9/16
/770162C	1 5/8
/770168C	1 11/16
/770175C	1 3/4
/770181C	1 13/16
/770187C	1 7/8
/770200C	2
/770206C	2 1/16
/770212C	2 1/8
/770225C	2 1/4
/770231C	2 15/16

No.	Dia. In.
/770237C	2 3/8
/770250C	2 1/2
/770256C	2 9/16
/770262C	2 5/8
/770275C	2 3/4
/770287C	2 7/8
/770300C	3
/770312C	3 1/8
/770325C	3 1/4
/770337C	3 3/8
/770350C	3 1/2
/770362C	3 5/8
/770375C	3 3/4
/770387C	3 7/8
/770400C	4
/770412C	4 1/8
/770425C	4 1/4
/770437C	4 3/8
/770450C	4 1/2
/770475C	4 3/4
/770500C	5
/770550C	5 1/2
/770575C	5 3/4
/770600C	6

**M.K. MORSE**  
Reciprocating & Sabre/Jig Jaw  
Blades  
Carbide Grit



Tungsten carbide grains bonded to alloy body. Heat, wear, snag and abrasion resistant. Cut fiberglass, lath, plaster, ceramic tile, soil pipe, composites, particle board, laminates, hardwood flooring, marble, hardened steel. Will not tear thin materials. Fit most reciprocating and sabre/jig saw machines. For boat/aircraft manufacturing, counter tops, general construction, industrial maintenance.

Packaging: Boxed - 25/box, Carded - 10/box.

No.	Desc.	Size In.
<b>Boxed, 1/2" Shank Saw Blades</b>		
/772700	Reciprocating	8
<b>Boxed, Universal Shank/Jig Saw Blades</b>		
/7720358	Coarse Grit	3 5/8

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- Product
- Availability

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- Business

**M. K. MORSE**  
Arbors



**No. M24.** Fits drill No. MPD4S, saw Nos. AV09-AV244 and follow through Nos. AV12-AV244.



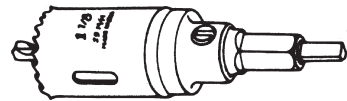
**No. M44.** Fits drill No. MPD4, arbor extension No. ME12, saw Nos. AV09-AV244 and follow through Nos. AV12-AV244.

**No. M46PS.** Fits drill No. MPD4S, arbor extension No. ME12, saw Nos. AV20-AV96 and follow through Nos. AV23-AV96.

No.	Model No.	Hex Shank Size In.	Thrd. Size In.	Chuck Size In.
.....	M24	1/4	1/2-20	1/4
/770012	M44*	7/16	1/2-20	1/2
.....	M46PS	7/16	5/8-18	1/2

\*Carded arbors available.

**M.K. MORSE**  
Hole Saws  
The Real McCoy™



Hole saw with built-in arbor in all 51 sizes (3/16"-6") and 14 mm sizes with 4-6 tpi variable pitch. Positive rake. M3 bi-metal tooth design. Deep cutting (TAD) model has 1 7/8" cutting depth for one-pass hole sawing in doors and 2" dimension lumber. 48 individually boxed sizes, 3/4"-6". To order deep cutting model change prefix from TA to TAD.

Complete Information Available on Request.

**M.K. MORSE**  
Hole Saw Kits



Hole Saw Kits Available.

Complete Information Available on Request.