

Reaming Tools

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ICS | USA

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INTERCHANGEABLE COUNTERBORES

RT-1

ICS USA

GENERAL PURPOSE

RIGHT HAND CUT



STRAIGHT SHANK

SHORT SERIES



TAPER SHANK

High Speed Steel Interchangeable Counterbores are designed to create a recess for a cap screw, spring or bolt. They are used with interchangeable pilots ground to fit various hole sizes to be counterbored.

SIZE	PILOT HOLE DIA.	NO. OF FLUTES	OVERALL LENGTH	STRAIGHT SHANK			TAPER SHANK		
				SHANK SIZE/LENGTH	ITEM NO.	PRICE	MORSE TAPER	ITEM NO.	PRICE
3/16	3/32	3	3-1/2	15/64 x 2-3/8	ICSS012	37.64			
7/32	3/32	3	3-5/8	15/64 x 2-3/4	ICSS014	37.64			
1/4	3/32	3	3-13/16	15/64 x 3-1/16	ICSS016	33.88	1	ICTS016	33.88
9/32	3/32	3	3-13/16	17/64 x 3-1/16	ICSS018	33.88	1	ICTS018	33.88
5/16	3/32	3	3-13/16	19/64 x 3-1/16	ICSS020	34.82	1	ICTS020	34.82
11/32	3/32	3	3-13/16	5/16 x 3-1/16	ICSS022	35.54	1	ICTS022	35.54
3/8	5/32	3	4-1/16	5/16 x 3-1/16	ICSS024	35.54	1	ICTS024	35.54
13/32	5/32	3	4-1/16	3/8 x 3-1/16	ICSS026	37.88	1	ICTS026	37.88
7/16	5/32	3	4-1/16	3/8 x 3-1/16	ICSS028	37.88	1	ICTS028	37.88
15/32	3/16	3	4-5/16	7/16 x 3-1/16	ICSS030	39.76	1	ICTS030	39.76
1/2	3/16	3	4-5/16	7/16 x 3-1/16	ICSS032	39.76	1	ICTS032	39.76
17/32	3/16	3	4-5/16	1/2 x 3-1/16	ICSS034	44.24	1	ICTS034	44.24
9/16	3/16	3	4-5/16	1/2 x 3-1/16	ICSS036	44.24	1	ICTS036	44.24
19/32	3/16	3	5-1/8	1/2 x 3-7/8	ICSS038	47.28	2	ICTS038	47.28
5/8	3/16	3	5-1/8	1/2 x 3-7/8	ICSS040	47.68	2	ICTS040	47.68
21/32	3/16	3	5-1/8	1/2 x 3-7/8	ICSS042	52.24	2	ICTS042	52.24
11/16	3/16	3	5-1/8	1/2 x 3-7/8	ICSS044	52.24	2	ICTS044	52.24
23/32	1/4	3	5-3/8	1/2 x 3-7/8	ICSS046	54.36	2	ICTS046	54.36
3/4	1/4	3	5-3/8	1/2 x 3-7/8	ICSS048	54.36	2	ICTS048	54.36
25/32	1/4	3	5-3/8	5/8 x 3-7/8	ICSS050	57.40	2	ICTS050	57.40
13/16	1/4	3	5-3/8	5/8 x 3-7/8	ICSS052	55.52	2	ICTS052	55.52
27/32	1/4	3	5-3/8	3/4 x 3-7/8	ICSS054	60.92	2	ICTS054	60.92
7/8	1/4	3	5-3/8	3/4 x 3-7/8	ICSS056	58.34	2	ICTS056	58.34
29/32	1/4	3	6-1/8	3/4 x 4-5/8	ICSS058	61.16	3	ICTS058	61.16
15/16	1/4	3	6-1/8	3/4 x 4-5/8	ICSS060	61.16	3	ICTS060	61.16
31/32	5/16	3	6-3/8	3/4 x 4-5/8	ICSS062	72.92	3	ICTS062	72.92
1	5/16	3	6-3/8	3/4 x 4-5/8	ICSS100	72.92	3	ICTS100	72.92
1-1/16	5/16	3	6-3/8	3/4 x 4-5/8	ICSS104	82.32	3	ICTS104	82.32
1-1/8	5/16	3	6-3/8	1 x 4-5/8	ICSS108	82.32	3	ICTS108	82.32
1-3/16	5/16	3	6-3/8	1 x 4-5/8	ICSS112	89.38	3	ICTS112	89.38
1-1/4	3/8	5	6-5/8	1 x 4-5/8	ICSS116	103.50	3	ICTS116	103.50
1-3/8	3/8	5	6-5/8	1 x 4-5/8	ICSS124	119.96	3	ICTS124	119.96
1-1/2	3/8	5	7-7/8	1-1/4 x 5-7/8	ICSS132	134.06	3	ICTS132	134.06
1-5/8	7/16	5	8-1/8	1-1/4 x 5-7/8	ICSS140	181.10	4	ICTS140	181.10
1-3/4	7/16	5	8-1/8	1-1/4 x 5-7/8	ICSS148	195.22	4	ICTS148	195.22
1-7/8	7/16	5	8-1/8	1-1/2 x 5-7/8	ICSS156	214.04	4	ICTS156	214.04
2	1/2	5	8-3/8	1-1/2 x 5-7/8	ICSS200	242.26	4	ICTS200	242.26
2-1/8	1/2	5	9-7/8	1-1/2 x 7-3/8	ICSS208	317.52	5	ICTS208	317.52
2-1/4	1/2	5	9-7/8	1-1/2 x 7-3/8	ICSS216	331.80	5	ICTS216	331.80
2-3/8	1/2	5	9-7/8	1-1/2 x 7-3/8	ICSS224	354.90	5	ICTS224	354.90
2-1/2	1/2	5	9-7/8	1-1/2 x 7-3/8	ICSS232	367.50	5	ICTS232	367.50
2-5/8	1/2	5	9-7/8	1-3/4 x 7-3/8	ICSS240	463.06	5	ICTS240	463.06
2-3/4	1/2	5	9-7/8	1-3/4 x 7-3/8	ICSS248	492.46	5	ICTS248	492.46
2-7/8	1/2	5	9-7/8	1-3/4 x 7-3/8	ICSS256	512.40	5	ICTS256	512.40
3	1/2	5	9-7/8	1-3/4 x 7-3/8	ICSS300	530.26	5	ICTS300	530.26

INTERCHANGEABLE PILOT COUNTERBORE SET

WOOD BOX

DESCRIPTION	TYPE OF COUNTERBORE	ITEM NO.	PRICE
<p>39 PIECE INTERCHANGEABLE PILOT & COUNTERBORE SET</p>	<p>Straight Shank - 1/4 to 1" by 16ths Interchangeable Pilots 1/8, 5/32, 3/16, 1/4 with 3/32 Shank 3/16, 7/32, 1/4, 9/32, 5/16 with 5/32 Shank 1/4, 5/16, 3/8, 7/16, 1/2 with 3/16 Shank 5/16, 3/8, 7/16, 1/2, 9/16, 5/8 with 1/4 Shank 3/8, 7/16, 1/2, 9/16, 5/8, 3/4 with 5/16 Shank</p>	CS-ICP-39	538.12

METRIC CAP SCREW COUNTERBORE SET**WOOD STAND**

DESCRIPTION	TYPE OF COUNTERBORE	ITEM NO.	PRICE
7 PC METRIC CAP SCREW COUNTERBORE SET Sizes M3, M4, M5, M6 M8, M10, M12 (Not Illustrated)	Metric Cap Screw Counterbore 3 Flute - Straight Shank	CS-CSC3FM-7	282.98

HIGH SPEED STEEL
FILLISTER HEAD SCREW COUNTERBORES

ICS USA**SPECIAL PURPOSE****RIGHT HAND CUT**STRAIGHT
SHANKTWO FLUTE
SOLID PILOT

High Speed Steel Fillister Head Screw Counterbores are designed to create a recess for small fillister and flat head machine screws. Solid pilot will not score or damage pilot hole. Cutting action is chatterless.

SCREW SIZE	PLOT SIZE	CUTTING DIAMETER	SHANK DIAMETER	OVERALL LENGTH	ITEM NO.
#2	.085	.155	3/16	2-1/2	FHSC#02
#3	.098	.176	3/16	2-1/2	FHSC#03
#4	.111	.198	.198	2-1/2	FHSC#04
#5	.124	.220	.220	2-1/2	FHSC#05
#6	.137	.241	.241	2-1/2	FHSC#06
#8	.163	.285	.285	2-3/4	FHSC#08
#10	.189	.328	.328	2-3/4	FHSC#10
#12	.215	.372	.372	3	FHSC#12
1/4	1/4	13/32	5/16	3-5/8	FHSC016
5/16	5/16	15/32	3/8	4	FHSC020
3/8	3/8	19/32	7/16	4-3/8	FHSC024
7/16	7/16	21/32	1/2	4-3/4	FHSC028
1/2	1/2	9/16	9/16	5-1/4	FHSC032

FILLISTER HEAD SCREW COUNTERBORE SETS**WOOD STAND**

DESCRIPTION	TYPE OF COUNTERBORE	ITEM NO.	PRICE
5 PC FILLISTER HEAD COUNTERBORE SET Sizes #2, #4, #6, #8, #10 (Not Illustrated)	Fillister Head Screw Counterbore 2 Flute - Straight Shank	CS-FHSC-5	75.26
4 PC FILLISTER HEAD COUNTERBORE SET Sizes 1/4, 5/16, 3/8, 1/2 (Not Illustrated)	Fillister Head Screw Counterbore 2 Flute - Straight Shank	CS-FHSC-4	129.36

COUNTERBORE PILOTS - INTERCHANGEABLE

ICS USA

SPECIAL PURPOSE

SOLID PILOT



Interchangeable counterbore pilots are used with interchangeable pilot style counterbores and spot facers, including carbide tipped and aircraft counterbores to produce various combinations of sizes. All counterbore pilots have a flat on one side of the shank for the set screw to hold the pilot in place. To order, select a pilot with a shank diameter to fit the pilot hole diameter of the counterbore being used.

NOTE: Flatted shank may need an additional flat to work with all the different brands of counterbores, as there is no industry standard for where the set screws are placed. [See example and explanation here.](#)

PILOT SIZE	ITEM NO.	PRICE
3/32" SHANK		
3/32	ICP006X006	5.76
1/8	ICP006X080	5.76
5/32	ICP006X010	5.76
3/16	ICP006X012	5.76
7/32	ICP006X014	5.76
1/4	ICP006X016	6.52
9/32	ICP006X018	6.52
5/16	ICP006X020	6.52
11/32	ICP006X022	6.52
3/8	ICP006X024	6.52
7/16	ICP006X028	6.52
1/2	ICP006X032	6.52
3/4	ICP006X048	6.52
1/8" SHANK		
1/8	ICP008X008	5.76
5/32	ICP008X010	5.76
3/16	ICP008X012	5.76
7/32	ICP008X014	5.76
1/4	ICP008X016	6.52
9/32	ICP008X018	6.52
5/16	ICP008X020	6.52
11/32	ICP008X022	6.52
3/8	ICP008X024	6.52
13/32	ICP008X026	6.52
7/16	ICP008X028	6.52
15/32	ICP008X030	8.50
1/2	ICP008X032	8.50
17/32	ICP008X034	8.50
9/16	ICP008X036	8.50
5/32" SHANK		
5/32	ICP010X010	5.76
3/16	ICP010X012	5.76
7/32	ICP010X014	5.76
1/4	ICP010X016	6.52
9/32	ICP010X018	6.52
5/16	ICP010X020	6.52
11/32	ICP010X022	6.52
3/8	ICP010X024	6.52
13/32	ICP010X026	6.52
7/16	ICP010X028	6.52
1/2	ICP010X032	8.50
3/16" SHANK		
3/16	ICP012X012	5.76
7/32	ICP012X014	5.76
1/4	ICP012X016	6.52
9/32	ICP012X018	6.52
5/16	ICP012X020	6.52
11/32	ICP012X022	6.52

PILOT SIZE	ITEM NO.	PRICE
3/16" SHANK		
3/8	ICP012X024	6.52
13/32	ICP012X026	6.52
7/16	ICP012X028	6.52
15/32	ICP012X030	8.50
1/2	ICP012X032	8.50
17/32	ICP012X034	8.50
9/16	ICP012X036	8.50
5/8	ICP012X040	8.50
11/16	ICP012X044	8.50
3/4	ICP012X048	8.50
1/4" SHANK		
1/4	ICP016X016	6.52
9/32	ICP016X018	6.52
5/16	ICP016X020	6.52
11/32	ICP016X022	6.52
3/8	ICP016X024	6.52
13/32	ICP016X026	6.52
7/16	ICP016X028	6.52
15/32	ICP016X030	8.50
1/2	ICP016X032	8.50
17/32	ICP016X034	8.50
9/16	ICP016X036	8.50
19/32	ICP016X038	8.50
5/8	ICP016X040	8.50
21/32	ICP016X042	8.50
11/16	ICP016X044	8.50
3/4	ICP016X048	8.50
13/16	ICP016X052	8.50
7/8	ICP016X056	13.50
15/16	ICP016X060	13.50
1	ICP016X100	13.50
5/16" SHANK		
5/16	ICP020X020	8.50
11/32	ICP020X022	8.50
3/8	ICP020X024	8.50
13/32	ICP020X026	8.50
7/16	ICP020X028	8.50
15/32	ICP020X030	12.26
1/2	ICP020X032	12.26
17/32	ICP020X034	12.26
9/16	ICP020X036	12.26
19/32	ICP020X038	12.26
5/8	ICP020X040	12.26
21/32	ICP020X042	12.26
11/16	ICP020X044	12.26
3/4	ICP020X048	12.26
13/16	ICP020X052	12.26
7/8	ICP020X056	14.76

PILOT SIZE	ITEM NO.	PRICE
5/16" SHANK		
15/16	ICP020X060	14.76
1	ICP020X100	14.76
1-1/16	ICP020X104	17.52
1-1/8	ICP020X108	17.52
3/8" SHANK		
3/8	ICP024X024	9.96
13/32	ICP024X026	9.96
7/16	ICP024X028	9.96
15/32	ICP024X030	9.96
1/2	ICP024X032	9.96
17/32	ICP024X034	11.52
9/16	ICP024X036	11.52
5/8	ICP024X040	13.26
11/16	ICP024X044	13.26
3/4	ICP024X048	13.26
13/16	ICP024X052	14.12
7/8	ICP024X056	14.12
15/16	ICP024X060	14.12
1	ICP024X100	17.24
1-1/16	ICP024X104	17.24
1-1/8	ICP024X108	17.24
1-5/32	ICP024X110	20.22
1-3/16	ICP024X112	20.22
1-1/4	ICP024X116	20.22
1-5/16	ICP024X120	20.22
1-3/8	ICP024X124	20.22
1-7/16	ICP024X128	21.72
1-1/2	ICP024X132	23.86
7/16" SHANK		
7/16	ICP028X028	12.82
1/2	ICP028X032	12.82
9/16	ICP028X036	12.82
5/8	ICP028X040	12.82
11/16	ICP028X044	14.76
3/4	ICP028X048	14.76
13/16	ICP028X052	14.76
7/8	ICP028X056	14.76
15/16	ICP028X060	14.76
1	ICP028X100	19.26
1-1/16	ICP028X104	19.26
1-1/8	ICP028X108	19.26
1-3/16	ICP028X112	19.26
1-1/4	ICP028X116	21.02
1-5/16	ICP028X120	21.02
1-3/8	ICP028X124	21.02
1-7/16	ICP028X128	21.02
1-1/2	ICP028X132	21.02
1-9/16	ICP028X136	22.50

PILOT SIZE	ITEM NO.	PRICE
7/16" SHANK		
1-5/8	ICP028X140	22.50
1-11/16	ICP028X144	22.50
1-3/4	ICP028X148	22.50
1-13/16	ICP028X152	22.50
1-7/8	ICP028X156	22.50
1/2" SHANK		
1/2	ICP032X032	12.02
17/32	ICP032X034	12.02
9/16	ICP032X036	12.02
5/8	ICP032X040	12.02
11/16	ICP032X044	12.02
3/4	ICP032X048	12.02
13/16	ICP032X052	14.98
7/8	ICP032X056	14.98
15/16	ICP032X060	14.98
1	ICP032X100	21.76
1-1/16	ICP032X104	19.26
1-1/8	ICP032X108	19.26
1-3/16	ICP032X112	21.76
1-1/4	ICP032X116	21.76
1-5/16	ICP032X120	21.76
1-3/8	ICP032X124	26.04
1-7/16	ICP032X128	26.04
1-1/2	ICP032X132	26.04
1-9/16	ICP032X136	26.04
1-5/8	ICP032X140	30.30
1-11/16	ICP032X144	30.30
1-3/4	ICP032X148	30.30
1-13/16	ICP032X152	33.42
1-7/8	ICP032X156	33.42
1-15/16	ICP032X160	33.42
2	ICP032X200	40.46
2-1/16	ICP032X204	40.46
2-1/8	ICP032X208	40.46
2-3/16	ICP032X212	46.30
2-1/4	ICP032X216	46.30
2-5/16	ICP032X220	46.30
2-3/8	ICP032X224	57.94
2-7/16	ICP032X228	57.94
2-1/2	ICP032X232	57.94
2-9/16	ICP032X236	61.00
2-5/8	ICP032X240	61.00
2-11/16	ICP032X244	61.00
2-3/4	ICP032X248	79.74
2-13/16	ICP032X252	79.74
2-7/8	ICP032X256	87.10
2-15/16	ICP032X260	87.10
3	ICP032X300	87.10

SHANK DIA.	SHANK LENGTH
3/32	1-1/4
1/8	1-1/2
5/32	1-1/2

SHANK DIA.	SHANK LENGTH
3/16	1-3/4
1/4	1-7/8
5/16	2-1/8

SHANK DIA.	SHANK LENGTH
3/8	2-3/8
7/16	2-5/8
1/2	2-3/4

Length of pilot head is equal to its diameter.

CAP SCREW COUNTERBORES

ICS USA

SPECIAL PURPOSE

RIGHT HAND CUT



STRAIGHT SHANK

3 FLUTE
SOLID PILOT

TAPER SHANK

High Speed Steel Cap Screw Counterbores are designed to create a recess for socket head cap screws and shoulder screws. They are also used for spot facing smaller spots, enlarging or cleaning holes. Solid pilot will not score or damage pilot hole. Cutting action is chatterless. They are available with a straight shank or a Morse taper shank.

CAP SCREW SIZE	PILOT DIA.	CUTTING DIA.	SHANK DIA.	STRAIGHT SHANK		TAPER SHANK		
				OVERALL LENGTH	ITEM NO.	MORSE TAPER	OVERALL LENGTH	ITEM NO.
1/4	9/32	13/32	3/8	5	CSC3F016	1	5-3/4	CSC3FTS016
5/16	11/32	1/2	7/16	5	CSC3F020	2	6	CSC3FTS020
3/8	13/32	19/32	1/2	6	CSC3F024	2	6-1/2	CSC3FTS024
7/16	15/32	11/16	1/2	7	CSC3F028	2	7	CSC3FTS028
1/2	17/32	25/32	1/2	7-1/2	CSC3F032	2	7-1/4	CSC3FTS032
5/8	21/32	31/32	3/4	7-1/2	CSC3F040	3	7-1/2	CSC3FTS040
3/4	13/16	1-3/16	1	8	CSC3F048	3	9	CSC3FTS048
7/8	15/16	1-3/8	1	8	CSC3F056	3	9	CSC3FTS056
1	1-1/16	1-9/16	1	10	CSC3F100	3	10	CSC3FTS100

CAP SCREW COUNTERBORE SET

WOOD STAND

DESCRIPTION	TYPE OF COUNTERBORE	ITEM NO.	PRICE
4 PC CAP SCREW COUNTERBORE SET Sizes #8, #10, 1/4, 3/8 (Not Illustrated)	Cap Screw Counterbore - 3 Flute - Straight Shank	CS-CSC3F-4	105.84

CAP SCREW COUNTERBORES - METRIC

ICS USA

SPECIAL PURPOSE

RIGHT HAND CUT



STRAIGHT SHANK

3 FLUTE
SOLID PILOT

High Speed Steel Metric Cap Screw Counterbores are designed to create a recess for socket head cap screws and shoulder screws. They are also used for spot facing smaller spots, enlarging or cleaning holes. Solid pilot will not score or damage pilot hole. Cutting action is chatterless.

CAP SCREW SIZE (mm)	PILOT DIA. (mm)	CUTTING DIA. (mm)	SHANK DIA.	STRAIGHT SHANK	
				OVERALL LENGTH	ITEM NO.
3.00	3.40	6.00	7/32	3	CSC3FM03.00
4.00	4.50	8.00	5/16	3-1/2	CSC3FM04.00
5.00	5.50	10.00	5/16	4-1/2	CSC3FM05.00
6.00	6.60	11.00	3/8	5	CSC3FM06.00
8.00	9.00	15.00	1/2	6	CSC3FM08.00
10.00	11.00	18.00	1/2	7	CSC3FM10.00
12.00	14.00	20.00	5/8	7-1/2	CSC3FM12.00
14.00	15.00	24.00	3/4	8	CSC3FM14.00
16.00	17.00	26.00	1	9	CSC3FM16.00
20.00	21.00	26.00	1	10	CSC3FM20.00

HIGH SPEED STEEL COMBINED DRILLS & COUNTERSINKS

ICS **WIS**

GENERAL PURPOSE

118° POINT

PLAIN
TYPE



60°, 82° & 90°
INCLUDED ANGLES

Plain Type Combined Drills & Countersinks are designed to produce accurate center holes in components which require machining between centers. Sizes #0 to #000 are often referred to as Missile & Aircraft Series.

SIZE	BODY DIA.	DRILL DIA.	DRILL LENGTH	OVERALL LENGTH	ITEM NO.		PRICE EACH	PKG. QTY.
					60°			
000	1/8	.020	.020	1-1/4	CDC#000		4.68	10
00	1/8	0.25	.025	1-1/4	CDC#00		4.68	10
0	1/8	1/32	1/32	1-1/4	CDC#0		4.68	10
1	1/8	3/64	3/64	1-1/4	CDC#01		1.76	10
2	3/16	5/64	5/64	1-7/8	CDC#02		1.98	10
3	1/4	7/64	7/64	2	CDC#03		1.98	10
4	5/16	1/8	1/8	2-1/8	CDC#04		2.12	10
4-1/2	3/8	9/64	9/64	2-1/2	CDC#04.5		3.68	10
5	7/16	3/16	3/16	2-3/4	CDC#05		4.82	10
6	1/2	7/32	7/32	3	CDC#06		8.40	5
7	5/8	1/4	1/4	3-1/4	CDC#07		14.90	1
8	3/4	5/16	5/16	3-1/2	CDC#08		20.44	1
9	7/8	11/32	11/32	3-5/8	CDC#09		46.20	1
10	1	3/8	3/8	3-3/4	CDC#10		63.00	1
					82°	90°		
1	1/8	3/64	3/64	1-1/4	CDC082#01	CDC090#01	4.12	10
2	3/16	5/64	5/64	1-7/8	CDC082#02	CDC090#02	5.00	10
3	1/4	7/64	7/64	2	CDC082#03	CDC090#03	5.46	10
4	5/16	1/8	1/8	2-1/8	CDC082#04	CDC090#04	6.60	10
5	7/16	3/16	3/16	2-3/4	CDC082#05	CDC090#05	11.60	10
6	1/2	7/32	7/32	3	CDC082#06	CDC090#06	15.38	5
7	5/8	1/4	1/4	3-1/4	CDC082#07	CDC090#07	25.96	1
8	3/4	5/16	5/16	3-1/2	CDC082#08	CDC090#08	39.82	1

Available with Titanium Nitride (TiN) Coating. Inquire for pricing.

HIGH SPEED STEEL COMBINED DRILLS & COUNTERSINKS

ICS **WIS**

GENERAL PURPOSE

118° POINT

BELL
TYPE



60° & 82°
INCLUDED ANGLES

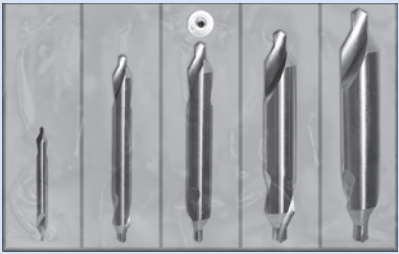
Bell Type Combined Drills & Countersinks are designed with an additional small 120° chamfer to protect the edges of the 60° hole.

SIZE	BODY DIA.	DRILL DIA.	OVERALL LENGTH	ITEM NO.	PRICE EACH	PKG. QTY.
11	1/8	3/64	1-1/4	CDC#11	3.62	10
12	3/16	1/16	1-7/8	CDC#12	3.62	10
13	1/4	3/32	2	CDC#13	3.62	10
14	5/16	7/64	2-1/8	CDC#14	3.62	10

SIZE	BODY DIA.	DRILL DIA.	OVERALL LENGTH	ITEM NO.	PRICE EACH	PKG. QTY.
15	7/16	5/32	2-3/4	CDC#15	7.06	10
16	1/2	3/16	3	CDC#16	10.54	5
17	5/8	7/32	3-1/4	CDC#17	14.06	5
18	3/4	1/4	3-1/2	CDC#18	18.86	5

COMBINED DRILL & COUNTERSINK SETS

VINYL POUCH

ILLUSTRATION	DESCRIPTION	TYPE OF DRILL	ITEM NO.	PRICE
	5 PC SET Sizes #1 to #5	HSS - Plain - 60° Titanium Nitride Coated - Plain - 60° Cobalt - Plain - 60°	DS-CDC-5 DS-CDCT-5 DS-CDCC-5	21.18 48.80 60.04
	5 PC SET Sizes #11 to #15 (Not Illustrated)	HSS - Bell - 60°	DS-CDC-5B	25.00

HIGH SPEED STEEL LONG LENGTH COMBINED DRILL & COUNTERSINKS

ICS

WIS

GENERAL PURPOSE

118° POINT

PLAIN TYPE



60° INCLUDED ANGLE

Long Length Combined Drills & Countersinks are designed to provide access to areas where standard lengths will not reach.

SIZE	BODY DIA.	DRILL DIA.	OVERALL LENGTH	ITEM NO.	PRICE EACH
1	1/8	3/64	3	CDCL#103	13.24
1	1/8	3/64	4	CDCL#104	14.04
1	1/8	3/64	5	CDCL#105	19.38
1	1/8	3/64	6	CDCL#106	25.34
2	3/16	5/64	4	CDCL#204	15.36
2	3/16	5/64	5	CDCL#205	19.38
2	3/16	5/64	6	CDCL#206	25.52
3	1/4	7/64	4	CDCL#304	16.12
3	1/4	7/64	5	CDCL#305	21.14
3	1/4	7/64	6	CDCL#306	25.52
4	5/16	1/8	4	CDCL#404	17.60
4	5/16	1/8	5	CDCL#405	22.72

SIZE	BODY DIA.	DRILL DIA.	OVERALL LENGTH	ITEM NO.	PRICE EACH
4	5/16	1/8	6	CDCL#406	25.98
4-1/2	3/8	9/64	4	CDCL#454	19.38
4-1/2	3/8	9/64	5	CDCL#455	23.10
4-1/2	3/8	9/64	6	CDCL#456	27.68
5	7/16	3/16	4	CDCL#504	21.74
5	7/16	3/16	5	CDCL#505	25.98
5	7/16	3/16	6	CDCL#506	29.36
6	1/2	7/32	5	CDCL#605	27.38
6	1/2	7/32	6	CDCL#606	33.00
7	5/8	1/4	5	CDCL#705	54.16
7	5/8	1/4	6	CDCL#706	61.46
8	3/4	5/16	6	CDCL#806	66.20

COBALT COMBINED DRILL & COUNTERSINKS

ICS

WIS

HEAVY DUTY

118° POINT

PLAIN TYPE



60° INCLUDED ANGLE

SIZE	BODY DIA.	DRILL DIA.	DRILL LENGTH	OVERALL LENGTH	ITEM NO.	PRICE EACH	PKG. QTY.
1	1/8	3/64	3/64	1-1/4	CDCC#01	8.56	10
2	3/16	5/64	5/64	1-7/8	CDCC#02	8.56	10
3	1/4	7/64	7/64	2	CDCC#03	8.56	10
4	5/16	1/8	1/8	2-1/8	CDCC#04	10.32	10
5	7/16	3/16	3/16	2-3/4	CDCC#05	20.58	10
6	1/2	7/32	7/32	3	CDCC#06	35.54	5
7	5/8	1/4	1/4	3-1/4	CDCC#07	66.18	1
8	3/4	5/16	5/16	3-1/2	CDCC#08	80.62	1

HIGH SPEED STEEL

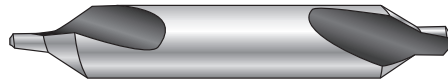
COMBINED DRILL & COUNTERSINKS - METRIC

ICS WIS

GENERAL PURPOSE

118° POINT

PLAIN
TYPE



60° INCLUDED
ANGLE

High Speed Steel Plain Type Metric Combined Drill and Countersinks are designed to produce accurate center holes in components which require machining between centers.

SIZE	BODY DIA.	DRILL DIA.	DRILL LENGTH	OVERALL LENGTH	ITEM NO.	PRICE	PKG. QTY.
1.00	3.15	1.00	1.00	33.50	CDCM01.00	-	10
1.25	3.15	1.25	1.25	33.50	CDCM01.25	-	10
1.60	4.00	1.60	1.60	37.50	CDCM01.60	-	10
2.00	5.00	2.00	2.00	42.00	CDCM02.00	3.20	10
2.50	6.30	2.50	2.50	47.00	CDCM02.50	3.96	10
3.15	8.00	3.15	3.15	52.00	CDCM03.15	4.62	10
4.00	10.00	4.00	4.00	59.00	CDCM04.00	7.06	10
5.00	12.50	5.00	5.00	66.00	CDCM05.00	10.02	5
6.30	16.00	6.30	6.30	74.00	CDCM06.30	16.66	5
8.00	20.00	8.00	8.00	83.00	CDCM08.00	32.20	1
10.00	25.00	10.00	10.00	103.00	CDCM10.00	46.62	1

SOLID CARBIDE COMBINED DRILL & COUNTERSINKS

ICS WIS

HEAVY DUTY

118° POINT

PLAIN
ANGLE



60° INCLUDED
ANGLE

SIZE	BODY DIA.	DRILL DIA.	DRILL LENGTH	OVERALL LENGTH	ITEM NO.	PRICE EACH	PKG. QTY.
00	1/8	.025	.025	1-1/4	SCCDC#00	25.76	1
0	1/8	1/32	1/32	1-1/4	SCCDC#0	25.76	1
1	1/8	3/64	3/64	1-1/4	SCCDC#01	23.30	1
2	3/16	5/64	5/64	1-7/8	SCCDC#02	26.96	1
3	1/4	7/64	7/64	2	SCCDC#03	38.98	1
4	5/16	1/8	1/8	2-1/8	SCCDC#04	55.64	1
5	7/16	3/16	3/16	2-3/4	SCCDC#05	92.86	1
6	1/2	7/32	7/32	3	SCCDC#06	108.56	1

PREMIUM (10% COBALT) MICROGRAIN CARBIDE

SOLID CARBIDE COMBINED DRILL & COUNTERSINKS

ICS USA

GENERAL PURPOSE

118° POINT

PLAIN
TYPE



INCLUDED ANGLES
60° - 82° - 90°

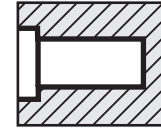
LONG LENGTH

Solid Carbide Long Length Combined Drill & Countersinks are designed to provide access to areas where standard lengths will not reach.

SIZE	BODY DIA.	DRILL DIA.	DRILL LENGTH	OVERALL LENGTH	UNCOATED			TiN COATED	PKG. QTY.
					60°	82°	120°	60°	
1	1/8	3/64	3/64	4	SCCDCL060-#01	SCCDCL082-#01	SCCDCL090-#01	SCCDCL060T-#01	1
2	3/16	5/64	5/64	4	SCCDCL060-#02	SCCDCL082-#02	SCCDCL090-#02	SCCDCL060T-#02	1
3	1/4	7/64	7/64	4	SCCDCL060-#03	SCCDCL082-#03	SCCDCL090-#03	SCCDCL060T-#03	1
4	5/16	1/8	1/8	4	SCCDCL060-#04	SCCDCL082-#04	SCCDCL090-#04	SCCDCL060T-#04	1
5	7/16	3/16	3/16	6	SCCDCL060-#05	SCCDCL082-#05	SCCDCL090-#05	SCCDCL060T-#05	1
6	1/2	7/32	7/32	6	SCCDCL060-#06	SCCDCL082-#06	SCCDCL090-#06	SCCDCL060T-#06	1
7	5/8	1/4	1/4	6	SCCDCL060-#07	SCCDCL082-#07	SCCDCL090-#07	SCCDCL060T-#07	1
8	3/4	5/16	5/16	6	SCCDCL060-#08	SCCDCL082-#08	SCCDCL090-#08	SCCDCL060T-#08	1

90° ANGLE STEP DRILLS**ICS USA****SPECIAL PURPOSE****118° POINT**

High Speed Steel 90° Angle Step Drills are designed for drilling and counterboring 90° cap screw clearance holes in one operation, saving machine time and reducing set up time. They can be resharpened or modified for a special length of step and are available in jobber length or taper length drill styles.

**For Drilling 90° Holes and Counterboring Cap Screw Clearance Holes**

SCREW SIZE	MINOR DIA.	MAJOR DIA.	STEP LENGTH	SHANK DIA.	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
#4	.136	7/32	3/8	7/32	2-1/2	3-3/4	SDJL90-#04	12.22
#5	.141	#1	3/8	#1	2-5/8	3-7/8	SDJL90-#05	13.06
#6	.150	1/4	1/2	1/4	2-3/4	4	SDJL90-#06	13.88
#8	.178	"L"	1/2	"L"	2-15/16	4-1/4	SDJL90-#08	15.94
#10	.204	"Q"	5/8	"Q"	3-7/16	4-3/4	SDJL90-#10	17.30
1/4	9/32	13/32	11/16	13/32	3-7/8	5-1/4	SDJL90-016	20.06
5/16	11/32	1/2	3/4	1/2	4-1/2	6	SDJL90-020	48.80
3/8	13/32	19/32	7/8	19/32	5-3/16	7-1/8	SDJL90-024	38.18
7/16	15/32	21/32	1	21/32	5-3/16	7-1/8	SDJL90-028	46.18
*1/2	17/32	25/32	1	25/32	3-1/4	5-1/8	SDJL90-032	53.20
*5/8	21/32	31/32	1	31/32	3-7/8	5-7/8	SDJL90-040	66.68

*Shorter than jobber length. • Reduced 1/2" shank available on screw sizes 3/8 to 5/8. (Add \$3.00)

45° ANGLE STEP DRILLS**ICS USA****SPECIAL PURPOSE****118° POINT**

High Speed Steel 45° Angle Step Drills are designed for drilling 45° chamfered holes to be tapped in one operation. The chamfered hole ensures alignment of tap threads and should always be used with thread forming taps as they displace metal above the mouth of the hole. They can be resharpened or modified for a special length of step and are available in jobber length or taper length drill styles.

**For Drilling 45° Chamfered Holes to be Tapped (to produce approx. 70° thread)**

SCREW SIZE	MINOR DIA.	MAJOR DIA.	STEP LENGTH	SHANK DIA.	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
#4-40	.089	.1285	3/8	.1285	1-5/8	2-3/4	SDJL45-#04-40	12.08
#5-40	.101	9/64	1/2	9/64	1-3/4	2-7/8	SDJL45-#05-40	12.92
#6-32	.109	5/32	1/2	5/32	2	3-1/8	SDJL45-#06-32	12.94
#8-32	.136	3/16	1/2	3/16	2-5/16	3-1/2	SDJL45-#08-32	13.26
#8-36	.136	3/16	1/2	3/16	2-5/16	3-1/2	SDJL45-#08-36	13.44
#10-24	.152	1/4	5/8	1/4	2-3/4	4	SDJL45-#10-24	14.28
#10-32	.161	1/4	5/8	1/4	2-3/4	4	SDJL45-#10-32	14.28
#12-24	.179	9/32	11/16	9/32	2-15/16	4-1/4	SDJL45-#10-24	16.36
1/4-20	.204	21/64	13/16	21/64	3-5/16	4-5/8	SDJL45-016-20	17.56
1/4-28	.218	21/64	13/16	21/64	3-5/16	4-5/8	SDJL45-016-28	17.56
5/16-18	.261	13/32	15/16	13/32	3-7/8	5-1/4	SDJL45-020-18	20.06
5/16-24	.272	13/32	15/16	13/32	3-7/8	5-1/4	SDJL45-020-24	20.06
3/8-16	.316	31/64	1	31/64	4-3/8	5-7/8	SDJL45-024-16	26.52
3/8-24	.339	31/64	1	31/64	4-3/8	5-7/8	SDJL45-024-24	26.52
7/16-14	.375	17/32	1-1/16	17/32	4-13/16	6-5/8	SDJL45-028-14	36.52
7/16-20	.390	17/32	1-1/16	17/32	4-13/16	6-5/8	SDJL45-028-20	36.52
1/2-13	.437	5/8	1-1/16	5/8	5-3/16	7-1/8	SDJL45-032-13	43.24
1/2-20	.452	5/8	1-1/16	5/8	5-3/16	7-1/8	SDJL45-032-20	43.24
5/8-11	.531	3/4	1-1/16	3/4	5-5/8	7-5/8	SDJL45-040-11	46.58

82° ANGLE STEP DRILLS

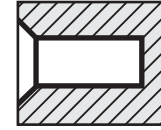
RT-9

ICS USA

SPECIAL PURPOSE

118° POINT

High Speed Steel 82° Angle Step Drills are designed for drilling and countersinking 82° flat head machine screw clearance holes in one operation, saving machine time and reducing set up time. They can be resharpened or modified for a special length of step and are available in jobber length or taper length drill styles.



For Drilling and Countersinking 82° Flat Head Machine Screw Clearance Holes

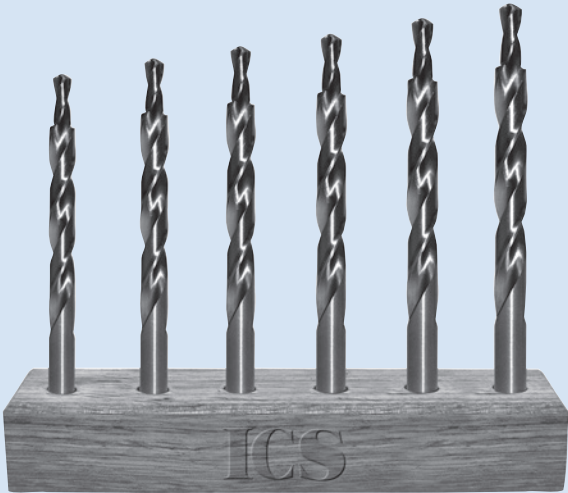
SCREW SIZE	MINOR DIA.	MAJOR DIA.	STEP LENGTH	SHANK DIA.	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
#4	.116	15/64	3/8	15/64	2-5/8	3-7/8	SDJL82-#04	13.76
#5	.128	"F"	3/8	"F"	2-7/8	4-1/8	SDJL82-#05	13.80
#6	.142	9/32	1/2	9/32	2-15/16	4-1/4	SDJL82-#06	14.04
#8	.169	"Q"	1/2	"Q"	3-7/16	4-3/4	SDJL82-#08	17.48
#10	.196	"W"	5/8	"W"	3-3/4	5-1/8	SDJL82-#10	19.42
1/4	.257	1/2	11/16	1/2	4-1/2	6	SDJL82-016	23.66
5/16	.320	5/8	3/4	5/8	5-3/16	7-1/8	SDJL82-020	35.32
*3/8	.383	3/4	7/8	3/4	3-1/8	5	SDJL82-024	48.02
*7/16	.446	13/16	1	13/16	3-3/8	5-1/4	SDJL82-028	54.58
*1/2	.510	7/8	1	7/8	3-1/2	5-1/2	SDJL82-032	64.56

*Shorter than jobber length. • Reduced 1/2" shank available on screw sizes 5/16 to 1/2. (Add \$3.00)

HIGH SPEED STEEL STEP DRILL SETS

WOOD STAND

High Speed Steel 6 Piece Step Drill Sets contain #6 to 3/8 screw sizes and are available in 45°, 82°, and 90° step angles in jobber length and taper length drill styles.

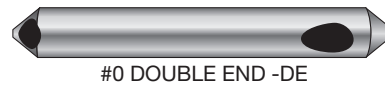
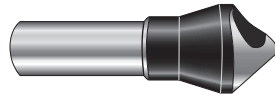
DESCRIPTION	TYPE OF STEP DRILL	ITEM NO.	PRICE
6 PC STEP DRILL SET #6 to 3/8 	Jobber Length 45°	SDJLS45-6	102.58
	Jobber Length 82°	SDJLS82-6	152.30
	Jobber Length 90°	SDJLS90-6	127.66

HIGH SPEED STEEL COUNTERSINKS - ZERO FLUTE (DEBURRING)

ICS USA

GENERAL PURPOSE

RIGHT HAND CUT

STRAIGHT
SHANK

#0 DOUBLE END -DE

AXIAL
RELIEF

High Speed Steel Zero Flute Countersinks are designed for countersinking and deburring operations. The single cutting edge removes stock quickly and prevents chatter. They can be resharpened by using an Axial Relieving Fixture or by using a small mounted grinding wheel and inserting it into the hole. Also known as Anti-Vibration Through-Hole Countersinks.

SIZE NO.	SHANK DIA.	OVERALL LENGTH	INCLUDED ANGLE		INCLUDED ANGLE				PRICE EACH
			LARGE DIA.	SMALL DIA.	60°	82°	90°	100°	
0	1/4	1-3/4	1/16	15/64	CSK060-#0	CSK082#0	CSK090-#0	CSK0100-#0	14.08
0	1/4	1-3/4	1/16	15/64	CSK060-#0-DE	CSK082-#0-DE	CSK090-#0-DE	CSK0100-#0-DE	13.60
1	1/4	1-3/4	5/32	13/32	CSK060-#1	CSK082-#1	CSK090-#1	CSK0100-#1	15.78
2	1/4	2	3/16	17/32	CSK060-#2	CSK082-#2	CSK090-#2	CSK0100-#2	17.02
3	1/2	2-3/4	5/16	25/32	CSK060-#3	CSK082-#3	CSK090-#3	CSK0100-#3	27.70
4	1/2	3	9/16	1-1/16	CSK060-#4	CSK082-#4	CSK090-#4	CSK0100-#4	42.20
5	1/2	3-3/4	5/8	1-15/32	-	CSK082-#5	-	-	67.92
6	5/8	4	3/4	1-3/4	-	CSK082-#6	-	-	101.62
7	5/8	4-3/8	1	2	-	CSK082-#7	-	-	122.62
8	3/4	4-3/4	1-1/4	2-1/2	-	CSK082-#8	-	-	144.42

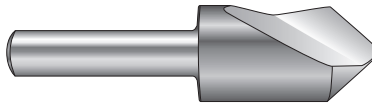
DE = Double End

HIGH SPEED STEEL COUNTERSINKS - SINGLE FLUTE

ICS USA

GENERAL PURPOSE

RIGHT HAND CUT

STRAIGHT
SHANKRADIAL
RELIEF

High Speed Steel Single Flute Countersinks should be used when multi-flute countersinks chatter or the hole is too small for a multi-flute countersink to enter. Use for machine and portable work when operating at higher speeds. Drilled hole should be at least 10% of the diameter of countersink. Single flute countersinks are available with 60 degree, 82 degree, 90 degree, 100 degree, 110 degree and 120 degree point angles. They are also available in 5 piece sets and 6" length.

SIZE NO.	SHANK DIA.	OVERALL LENGTH	CENTERLINE ANGLE / INCLUDED ANGLE						PRICE EACH
			30° / 60°	41° / 82°	45° / 90°	50° / 100°	55° / 110°	60° / 120°	
1/8	1/8	1-1/2	CSK160-008	CSK182-008	CSK190-008	CSK100-008	CSK110-008	CSK120-008	7.06
3/16	3/16	1-1/2	CSK160-012	CSK182-012	CSK190-012	CSK100-012	CSK110-012	CSK120-012	7.06
1/4	3/16	1-1/2	CSK160-016	CSK182-016	CSK190-016	CSK100-016	CSK110-016	CSK120-016	7.06
5/16	1/4	1-7/8	CSK160-020	CSK182-020	CSK190-020	CSK100-020	CSK110-020	CSK120-020	7.62
3/8	1/4	1-7/8	CSK160-024	CSK182-024	CSK190-024	CSK100-024	CSK110-024	CSK120-024	9.02
1/2	1/4	2	CSK160-032A	CSK182-032A	CSK190-032A	CSK100-032A	CSK110-032A	CSK120-032A	12.94
1/2	3/8	2	CSK160-032	CSK182-032	CSK190-032	CSK100-032	CSK110-032	CSK120-032	12.94
5/8	3/8	2-1/4	CSK160-040	CSK182-040	CSK190-040	CSK100-040	-	-	18.00
3/4	3/8	2-1/2	CSK160-048	CSK182-048	CSK190-048	CSK100-048	CSK110-048	CSK120-048	25.28
3/4	1/2	2-1/2	CSK160-048A	CSK182-048A	CSK190-048A	CSK100-048A	CSK110-048A	CSK120-048A	24.12
7/8	1/2	2-1/2	CSK160-056	CSK182-056	CSK190-056	CSK100-056	CSK110-056	CSK120-056	34.94
1	1/2	2-3/4	CSK160-100	CSK182-100	CSK190-100	CSK100-100	CSK110-100	-	38.26
1-1/4	1/2	3-3/8	CSK160-116	CSK182-116	CSK190-116	CSK100-116	CSK110-116	-	65.52
1-1/4	3/4	3-3/8	CSK160-116A	CSK182-116A	CSK190-116A	CSK100-116A	CSK110-116A	-	65.52
1-1/2	1/2	3-1/2	CSK160-132	CSK182-132	CSK190-132	CSK100-132	-	-	91.74
1-1/2	3/4	3-1/2	CSK160-132A	CSK182-132A	CSK190-132A	CSK100-132A	CSK110-132A	-	82.32
2	1/2	4	CSK160-200	CSK182-200	CSK190-200	CSK100-200	-	-	159.04
2	3/4	4	CSK160-200A	CSK182-200A	CSK190-200A	CSK100-200A	CSK110-200A	-	149.62
2-1/2	3/4	5	-	-	CSK190-232	-	-	-	329.28
3	3/4	5-1/4	CSK160-300	-	CSK190-300	-	-	-	411.60

HIGH SPEED STEEL

RT-11

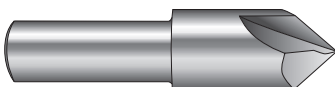
COUNTERSINKS - THREE FLUTE (CENTER REAMER)

ICS USA

GENERAL PURPOSE

RIGHT HAND CUT

STRAIGHT SHANK



RADIAL RELIEF

High Speed Steel Three Flute Countersinks should be used at a slower speed. (1/2 to 2/3 the speed used for drilling) Recommended for machine and portable work. Because of their centering ability, they are widely used in portable applications. They are also available in 5 piece sets.

SIZE	SHANK DIA.	OVERALL LENGTH	CENTERLINE ANGLE / INCLUDED ANGLE						PRICE EACH
			30° / 60°	41° / 82°	45° / 90°	50° / 100°	55° / 110°	60° / 120°	
1/4	3/16	1-1/2	CSK360-016	CSK382-016	CSK390-016	CSK300-016	CSK310-016	CSK320-016	7.06
5/16	1/4	1-7/8	CSK360-020	CSK382-020	CSK390-020	CSK300-020	CSK310-020	CSK320-020	7.62
3/8	1/4	1-7/8	CSK360-024	CSK382-024	CSK390-024	CSK300-024	CSK310-024	CSK320-024	9.02
1/2	1/4	2	CSK360-032A	CSK382-032A	CSK390-032A	CSK300-032A	-	-	12.94
1/2	3/8	2	CSK360-032	CSK382-032	CSK390-032	CSK300-032	CSK310-032	CSK320-032	12.94
5/8	3/8	2-1/4	CSK360-040	CSK382-040	CSK390-040	CSK300-040	CSK310-040	CSK320-040	18.00
3/4	3/8	2-1/2	CSK360-048A	CSK382-048A	CSK390-048A	CSK300-048A	-	-	25.28
3/4	1/2	2-1/2	CSK360-048	CSK382-048	CSK390-048	CSK300-048	CSK310-048	CSK320-048	24.12
7/8	1/2	2-1/2	CSK360-056	CSK382-056	CSK390-056	CSK300-056	CSK310-056	CSK320-056	34.94
1	1/2	2-3/4	CSK360-100	CSK382-100	CSK390-100	CSK300-100	-	-	38.26
1-1/4	1/2	3-3/8	CSK360-116	CSK382-116	CSK390-116	-	-	-	65.52
1-1/2	1/2	3-1/2	CSK360-132	CSK382-132	CSK390-132	-	-	-	91.74
1-1/2	3/4	3-1/2	CSK360-132A	CSK382-132A	CSK390-132A	CSK300-132A	-	-	82.32
2	3/4	4	CSK360-200A	CSK382-200A	CSK390-200A	CSK300-200A	-	-	159.04

HIGH SPEED STEEL

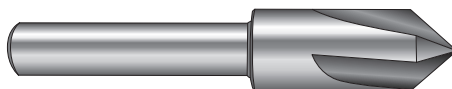
COUNTERSINKS - FOUR FLUTE (MACHINE)

ICS USA

GENERAL PURPOSE

RIGHT HAND CUT

STRAIGHT SHANK



RADIAL RELIEF

High Speed Steel Four Flute Machine Countersinks have a longer shank for use in turret lathes and for screw machine work. They are also available in 5 piece sets.

SIZE NO.	SHANK DIA.	OVERALL LENGTH	CENTERLINE ANGLE / INCLUDED ANGLE			PRICE EACH
			30° / 60°	41° / 82°	45° / 90°	
1/2	1/2	3-7/8	CSK460-032	CSK482-032	CSK490-032	23.86
5/8	1/2	4	CSK460-040	CSK482-040	CSK490-040	27.70
3/4	1/2	4-1/8	CSK460-048	CSK482-048	CSK490-048	40.62
7/8	1/2	4-1/4	CSK460-056	CSK482-056	CSK490-056	44.50
1	1/2	4-3/8	CSK460-100	CSK482-100	CSK490-100	50.78
1-1/4	1/2	5	CSK460-116	CSK482-116	CSK490-116	67.04
1-1/2	1/2	5-3/8	CSK460-132	CSK482-132	CSK490-132	90.56

Countersink sets in wood stands can be found on page 186.

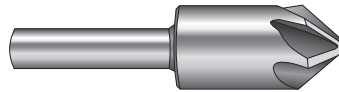
HIGH SPEED STEEL SIX FLUTE (CHATTERLESS) COUNTERSINKS

ICS USA

GENERAL PURPOSE

RIGHT HAND CUT

STRAIGHT SHANK



RADIAL RELIEF

High Speed Steel Six Flute Countersinks are designed for fast shearing and chatterless cuts. They produce an exceptionally fine finish and can be run at maximum speed. The six cutting edges quickly center in hole and produce a smaller chip load for chatterless machining. They are also available in 5 piece sets and 6" length.

SIZE NO.	SHANK DIA.	OVERALL LENGTH	CENTERLINE ANGLE / INCLUDED ANGLE					PRICE EACH
			30° / 60°	41° / 82°	45° / 90°	50° / 100°	60° / 120°	
1/8	1/8	1-1/2	CSK660-008	CSK682-008	CSK690-008	CSK600-008	CSK620-008	8.42
3/16	3/16	1-1/2	CSK660-012	CSK682-012	CSK690-012	CSK600-012	CSK620-012	8.42
1/4	1/4	2	CSK660-016	CSK682-016	CSK690-016	CSK600-016	CSK620-016	8.90
5/16	1/4	2	CSK660-020	CSK682-020	CSK690-020	CSK600-020	CSK620-020	9.72
3/8	1/4	2	CSK660-024	CSK682-024	CSK690-024	CSK600-024	CSK620-024	11.52
1/2	1/4	2	CSK660-032A	CSK682-032A	CSK690-032A	CSK600-032A	CSK620-032A	14.30
1/2	3/8	2	CSK660-032	CSK682-032	CSK690-032	CSK600-032	CSK620-032	14.30
5/8	3/8	2-3/4	CSK660-040	CSK682-040	CSK690-040	CSK600-040	CSK620-040	20.42
3/4	1/2	2-3/4	CSK660-048	CSK682-048	CSK690-048	CSK600-048	CSK620-048	30.12
7/8	1/2	2-3/4	CSK660-056	CSK682-056	CSK690-056	CSK600-056	CSK620-056	36.60
1	1/2	2-3/4	CSK660-100	CSK682-100	CSK690-100	CSK600-100	CSK620-100	43.94
1-1/4	3/4	3-3/8	CSK660-116	CSK682-116	CSK690-116	CSK600-116	CSK620-116	65.32
1-1/2	3/4	3-1/2	CSK660-132	CSK682-132	CSK690-132	CSK600-132	CSK620-132	92.98
1-3/4	3/4	4-1/4	CSK660-148	CSK682-148	CSK690-148	CSK600-148	CSK620-148	123.14
2	3/4	4-3/8	CSK660-200	CSK682-200	CSK690-200	CSK600-200	CSK620-200	143.80

HIGH SPEED STEEL COUNTERSINK SETS

WOOD STANDS

DESCRIPTION	ITEM NO.	INCLUDED ANGLE	PRICE
5 PC COUNTERSINK SETS			
<p>SIZES IN SETS</p> <p>1/4", 3/8", 1/2", 5/8", 3/4"</p> <p>1/2", 5/8", 3/4", 7/8", 1"</p> <p>#0, 1, 2, 3, 4</p> <p>Custom sets are available Inquire for pricing.</p>	SINGLE FLUTE		
	→ CSKS160-5	60°	82.28
	CSKS182-5	82°	82.28
	CSKS190-5	90°	82.28
	CSKS100-5	100°	82.28
	CSKS110-5	110°	82.28
	CSKS120-5	120°	82.28
	THREE FLUTE (CENTER REAMER)		
	CSKS360-5	60°	82.28
	CSKS382-5	82°	82.28
	CSKS390-5	90°	82.28
	CSKS300-5	100°	82.28
	CSKS310-5	110°	82.28
	CSKS320-5	120°	82.28
	SIX FLUTE (CHATTERLESS)		
	CSKS660-5	60°	96.38
	CSKS682-5	82°	96.38
	CSKS690-5	90°	96.38
CSKS600-5	100°	96.38	
→ CSKS620-5	120°	96.38	
FOUR FLUTE (MACHINE)			
→ CSKS460-5	60°	197.70	
CSKS482-5	82°	197.70	
→ CSKS490-5	90°	197.70	
ZERO FLUTE (DEBURRING)			
→ CSKS060-5	60°	80.40	
CSKS082-5	82°	80.40	
→ CSKS090-5	90°	80.40	

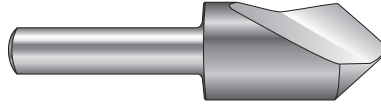
SOLID CARBIDE SINGLE FLUTE COUNTERSINKS ^{RT-13}

ICS USA

GENERAL PURPOSE

RIGHT HAND CUT

STRAIGHT SHANK



ECCENTRIC RELIEF

Solid Carbide Single Flute Countersinks are used for softer materials.

SIZE NO.	SHANK DIA.	OVERALL LENGTH	CENTERLINE ANGLE / INCLUDED ANGLE					PRICE EACH
			30° / 60°	41° / 82°	45° / 90°	50° / 100°	60° / 120°	
1/8	1/8	1-1/2	SCCSK160-008	SCCSK182-008	SCCSK190-008	SCCSK100-008	SCCSK120-008	12.08
3/16	3/16	2	SCCSK160-012	SCCSK182-012	SCCSK190-012	SCCSK100-012	SCCSK120-012	19.12
1/4	1/4	2	SCCSK160-016	SCCSK182-016	SCCSK190-016	SCCSK100-016	SCCSK120-016	21.10
3/8	1/4	2-3/8	SCCSK160-024	SCCSK182-024	SCCSK190-024	SCCSK100-024	SCCSK120-024	37.00
1/2	1/4	2-1/2	SCCSK160-032	SCCSK182-032	SCCSK190-032	SCCSK100-032	SCCSK120-032	49.28
5/8	3/8	3	SCCSK160-040	SCCSK182-040	SCCSK190-040	SCCSK100-040	SCCSK120-040	66.36
3/4	1/2	3	SCCSK160-048	SCCSK182-048	SCCSK190-048	SCCSK100-048	SCCSK120-048	98.30
1	1/2	3	SCCSK160-100	SCCSK182-100	SCCSK190-100	SCCSK100-100	SCCSK120-100	155.80
1-1/4	3/4	3-1/4	SCCSK160-116	SCCSK182-116	SCCSK190-116	SCCSK100-116	SCCSK120-116	279.44
1-1/2	3/4	3-1/2	SCCSK160-132	SCCSK182-132	SCCSK190-132	SCCSK100-132	SCCSK120-132	401.06

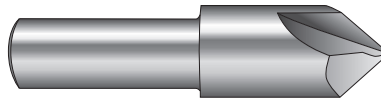
SOLID CARBIDE THREE FLUTE COUNTERSINKS

ICS USA

GENERAL PURPOSE

RIGHT HAND CUT

STRAIGHT SHANK



ECCENTRIC RELIEF

Solid Carbide Three Flute Countersinks are used for general purpose work.

SIZE NO.	SHANK DIA.	OVERALL LENGTH	CENTERLINE ANGLE / INCLUDED ANGLE					PRICE EACH
			30° / 60°	41° / 82°	45° / 90°	50° / 100°	60° / 120°	
1/8	1/8	1-1/2	SCCSK360-008	SCCSK382-008	SCCSK390-008	SCCSK300-008	SCCSK320-008	12.08
3/16	3/16	2	SCCSK360-012	SCCSK382-012	SCCSK390-012	SCCSK300-012	SCCSK320-012	19.12
1/4	1/4	2	SCCSK360-016	SCCSK382-016	SCCSK390-016	SCCSK300-016	SCCSK320-016	21.10
3/8	1/4	2-3/8	SCCSK360-024	SCCSK382-024	SCCSK390-024	SCCSK300-024	SCCSK320-024	37.00
1/2	1/4	2-1/2	SCCSK360-032	SCCSK382-032	SCCSK390-032	SCCSK300-032	SCCSK320-032	49.28
5/8	3/8	3	SCCSK360-040	SCCSK382-040	SCCSK390-040	SCCSK300-040	SCCSK320-040	66.36
3/4	1/2	3	SCCSK360-048	SCCSK382-048	SCCSK390-048	SCCSK300-048	SCCSK320-048	98.30
1	1/2	3	SCCSK360-100	SCCSK382-100	SCCSK390-100	SCCSK300-100	SCCSK320-100	155.80
1-1/4	3/4	3-1/4	SCCSK360-116	SCCSK382-116	SCCSK390-116	SCCSK300-116	SCCSK320-116	279.44
1-1/2	3/4	3-1/2	SCCSK360-132	SCCSK382-132	SCCSK390-132	SCCSK300-132	SCCSK320-132	401.06

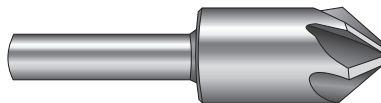
SOLID CARBIDE SIX FLUTE COUNTERSINKS

ICS USA

HEAVY DUTY

RIGHT HAND CUT

STRAIGHT SHANK

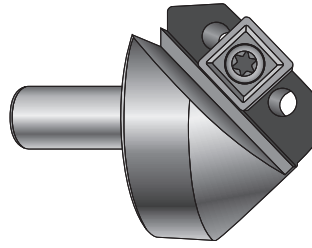


RADIAL RELIEF

Solid Carbide Six Flute Countersinks are used for hardened steels and metals.

SIZE NO.	SHANK DIA.	OVERALL LENGTH	CENTERLINE ANGLE / INCLUDED ANGLE					PRICE EACH
			30° / 60°	41° / 82°	45° / 90°	50° / 100°	60° / 120°	
1/8	1/8	1-1/2	SCCSK660-008	SCCSK682-008	SCCSK690-008	SCCSK600-008	SCCSK620-008	12.08
3/16	3/16	2	SCCSK660-012	SCCSK682-012	SCCSK690-012	SCCSK600-012	SCCSK620-012	19.12
1/4	1/4	2	SCCSK660-016	SCCSK682-016	SCCSK690-016	SCCSK600-016	SCCSK620-016	21.10
3/8	1/4	2-3/8	SCCSK660-024	SCCSK682-024	SCCSK690-024	SCCSK600-024	SCCSK620-024	37.00
1/2	1/4	2-1/2	SCCSK660-032	SCCSK682-032	SCCSK690-032	SCCSK600-032	SCCSK620-032	49.28
5/8	3/8	3	SCCSK660-040	SCCSK682-040	SCCSK690-040	SCCSK600-040	SCCSK620-040	66.36
3/4	1/2	3	SCCSK660-048	SCCSK682-048	SCCSK690-048	SCCSK600-048	SCCSK620-048	98.30
1	1/2	3	SCCSK660-100	SCCSK682-100	SCCSK690-100	SCCSK600-100	SCCSK620-100	155.80
1-1/4	3/4	3-1/4	SCCSK660-116	SCCSK682-116	SCCSK690-116	SCCSK600-116	SCCSK620-116	279.44
1-1/2	3/4	3-1/2	SCCSK660-132	SCCSK682-132	SCCSK690-132	SCCSK600-132	SCCSK620-132	401.06

CARBIDE INSERT INDEXABLE COUNTERSINKS

ICS **WIS**
HEAVY DUTY
POSITIVE RAKE

 60°, 82°, 90°
POINT ANGLE

Indexable Countersinks are designed with a positive rake for smooth cutting without chatter. No tool resharpener needed. Uses standard square or triangle inserts that come with the countersink.

CUTTER BODY DIA.		SHANK	INSERTS	ITEM NO.			PRICE
MIN	MAX	DIA.	USED	60°	82°	90°	
1/8	1/2	3/8	TCMT21.51SC6	ICSK060-032	ICSK082-032	ICSK090-032	33.14
1/4	3/4	1/2	TCMT32.51SC6	ICSK060-048	ICSK082-048	ICSK090-048	38.56
1/2	1-3/4	1/2	SCMT432C6	ICSK060-148	ICSK082-148	ICSK090-148	49.38
1-1/4	2-1/2	3/4	SCMT432C6	ICSK060-232	ICSK082-232	ICSK090-232	60.54

CARBIDE (INDEXABLE) INSERTS


ICS **WIS**
SPECIAL PURPOSE
PRECISION GROUND

For use with ICS Indexable Countersinks. Choose a C6 or Titanium Nitride coated.

INSERT STYLE	GRADE	RADIUS	INSCRIBED CRICLE (I.C.)	ITEM NO.	PRICE
TRIANGLE	C-6	1/64	1/4	I-TCMT21.51SC6	7.02
	TiN Coat	1/64	1/4	I-TCMT21.51ST6	9.82
	C-6	1/64	3/8	I-TCMT32.51SC6	7.02
	TiN Coat	1/64	3/8	I-TCMT32.51ST6	9.82
SQUARE	C-6	1/32	1/2	I-SCMT432C6	14.06
	TiN Coat	1/32	1/2	I-SCMT432T6	16.86

CARBIDE INSERT INDEXABLE COUNTERSINK SETS

WOOD CASE

DESCRIPTION	POINT ANGLE	ITEM NO.	PRICE
3 PC INDEXABLE COUNTERSINK SET (NOT ILLUSTRATED) SIZES 3/4, 1-3/4, 2-1/2	60°	ICSKS060-3	163.16
	82°	ICSKS082-3	163.16
	90°	ICSKS090-3	163.16
4 PC INDEXABLE COUNTERSINK SET  SIZES 1/2, 3/4, 1-3/4, 2-1/2	60°	ICSKS060-4	199.60
	82°	ICSKS082-4	199.60
	90°	ICSKS090-4	199.60

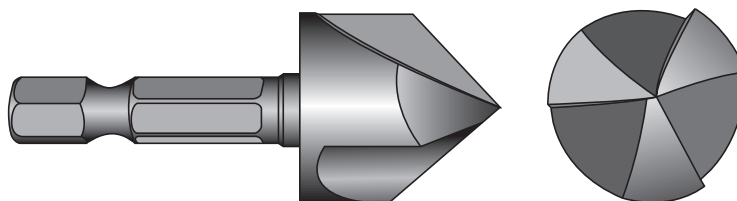
THREE FLUTE (QUICK CHANGE) COUNTERSINKS

ICS WIS

GENERAL PURPOSE

RIGHT HAND CUT

QUICK CHANGE
1/4" HEX SHANK



82°
POINT ANGLE

High Speed Steel Three Flute Quick Change Countersinks fit into a 1/4" hex power driver or any 3-jaw style power drill chuck. Used to countersink most ferrous and non-ferrous metals, plastic, wood, etc.

SIZE	OVERALL LENGTH	ITEM NO.	CENTERLINE ANGLE/ INCLUDED ANGLE	PRICE
1/4	2"	CSKQC382-016	41° / 82°	5.26
3/8	2"	CSKQC382-024	41° / 82°	5.78
1/2	2"	CSKQC382-032	41° / 82°	6.30
5/8	2"	CSKQC382-040	41° / 82°	10.50
3/4	2"	CSKQC382-048	41° / 82°	12.60

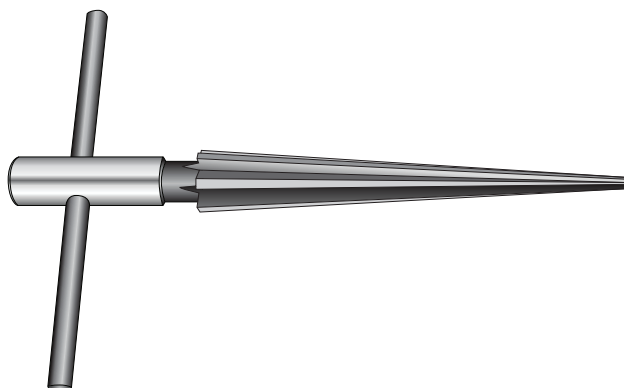
TOOL STEEL / HIGH SPEED STEEL REPAIRMAN'S TAPER REAMER

ICS WIS

GENERAL PURPOSE / HEAVY DUTY

60° POINT

T-HANDLE
SHANK



STRAIGHT
FLUTE

Tool Steel Repairman's Taper Reamers are used to enlarge and countersink holes in soft metals, plastics, and similar materials. High Speed Steel Repairman's Taper Reamers are designed for removing burrs from small holes, tubing, and enlarging holes in sheet metal. They are used by plumbers, mechanics, electricians, and machinists. Not for use in machine power tools.

POINT DIA.	LARGE DIA.	LENGTH OF CUT	OVERALL LENGTH	SHANK DIA.	FLUTE END STYLE	ITEM NO.	PRICE
TOOL STEEL							
1/8	1/2	3-1/2	5-5/8	1/2	60° POINT	RTR032	11.00
3/16	5/8	4-1/4	6	12MM (.4724)	60° POINT	RTR040	12.88
3/16	5/8	4-1/4	6	9/16 HEX	60° POINT	RTR040HX	15.00
HIGH SPEED STEEL							
1/8	1/2	3-5/8	5-9/16	1/2	60° POINT	RTRHD032	15.50
1/8	5/8	3-5/8	5-9/16	1/2	60° POINT	RTRHD040	18.20
3/8	1	4-1/2	6	1/2	60° POINT	RTRHD100	39.96

HIGH SPEED STEEL COUNTERSINKS - LONG REACH

ICS USA
SPECIAL PURPOSE
RIGHT HAND CUT
**EXTRA LENGTH
STRAIGHT SHANK**
**FAST CUT
60°, 82°, 90° & 100° POINT ANGLES**
**RADIAL
RELIEF**

SINGLE FLUTE



High Speed Steel Long-Reach (Extended Length) Single Flute Countersinks are used for difficult to reach tool and die work. The single flute is designed for chamfering and deburring holes too small for multi-flute countersinks.

SIZE	SHANK DIAMETER	OVERALL LENGTH	ITEM NO.				PRICE
			60°	82°	90°	100°	
1/4	1/4	6	CSKXL160-016	CSKXL182-016	CSKXL190-016	CSKXL100-016	19.66
5/16	1/4	6	CSKXL160-020	CSKXL182-020	CSKXL190-020	CSKXL100-020	20.22
3/8	1/4	6	CSKXL160-024	CSKXL182-024	CSKXL190-024	CSKXL100-024	23.10
1/2	3/8	6	CSKXL160-032	CSKXL182-032	CSKXL190-032	CSKXL100-032	31.50
5/8	3/8	6	CSKXL160-040	CSKXL182-040	CSKXL190-040	CSKXL100-040	37.28
3/4	1/2	6	CSKXL160-048	CSKXL182-048	CSKXL190-048	CSKXL100-048	41.90
1	1/2	6	CSKXL160-100	CSKXL182-100	CSKXL190-100	CSKXL100-100	61.96

THREE FLUTE



High Speed Steel Long-Reach (Extended Length) Three Flute Countersinks are used for difficult to reach tool and die work. They should be used at a slower speed. (1/2 to 2/3 the speed used for drilling) Recommended for machine and portable work. Because of their centering ability, they are widely used in portable applications

SIZE	SHANK DIAMETER	OVERALL LENGTH	ITEM NO.				PRICE
			60°	82°	90°	100°	
1/4	1/4	6	CSKXL360-016	CSKXL382-016	CSKXL390-016	CSKXL300-016	-
5/16	1/4	6	CSKXL360-020	CSKXL382-020	CSKXL390-020	CSKXL300-020	-
3/8	1/4	6	CSKXL360-024	CSKXL382-024	CSKXL390-024	CSKXL300-024	CALL FOR PRICE
1/2	3/8	6	CSKXL360-032	CSKXL382-032	CSKXL390-032	CSKXL300-032	CALL FOR PRICE
5/8	3/8	6	CSKXL360-040	CSKXL382-040	CSKXL390-040	CSKXL300-040	CALL FOR PRICE
3/4	1/2	6	CSKXL360-048	CSKXL382-048	CSKXL390-048	CSKXL300-048	-
1	1/2	6	CSKXL360-100	CSKXL382-100	CSKXL390-100	CSKXL300-100	-

SIX FLUTE



High Speed Steel Long-Reach (Extended Length) Six Flute Countersinks are used for difficult to reach tool and die work requiring fine finish cuts. The six cutting edges quickly center in hole and produce a smaller chip load.

SIZE	SHANK DIAMETER	OVERALL LENGTH	ITEM NO.				PRICE
			60°	82°	90°	100°	
1/4	1/4	6	CSKXL660-016	CSKXL682-016	CSKXL690-016	CSKXL600-016	21.02
5/16	1/4	6	CSKXL660-020	CSKXL682-020	CSKXL690-020	CSKXL600-020	22.34
3/8	1/4	6	CSKXL660-024	CSKXL682-024	CSKXL690-024	CSKXL600-024	25.26
1/2	3/8	6	CSKXL660-032	CSKXL682-032	CSKXL690-032	CSKXL600-032	33.60
5/8	3/8	6	CSKXL660-040	CSKXL682-040	CSKXL690-040	CSKXL600-040	40.36
3/4	1/2	6	CSKXL660-048	CSKXL682-048	CSKXL690-048	CSKXL600-048	47.26
1	1/2	6	CSKXL660-100	CSKXL682-100	CSKXL690-100	CSKXL600-100	65.10

Note: Special length countersinks are available. Inquire for pricing.

CHUCKING REAMERS - STRAIGHT SHANK

ICS

WIS

GENERAL PURPOSE

RIGHT HAND CUT



STRAIGHT FLUTE

High Speed Steel Straight Shank Straight Flute Fractional Size Chucking Reamers are designed for general purpose reaming of most ferrous and non-ferrous metals. The cutting edge is ground with a 45° chamfer angle for easy hole entry. They are also known as Machine Reamers. Available in 29 piece sets.



HELICAL FLUTE

High Speed Steel Helical Flute Fractional Size Chucking Reamers are designed for reaming materials where additional shear is necessary and to improve chip removal in blind holes. The cutting edge is ground with a 45° chamfer angle for easy hole entry. They are also known as Machine Reamers. Available in 29 piece sets.

Fractional Sizes (Straight Shank) 3/64" to 2" Dia.

SIZE	DEC. EQUIV.	SHANK DIA.	FLUTE LENGTH	OVERALL LENGTH	FLUTE	
					STRAIGHT	HELICAL
					CRSF	CRHF
3/64	.0469	.0455	1/2	2-1/2	14.02	-
1/16	.0625	.0585	1/2	2-1/2	14.02	-
5/64	.0781	.0720	3/4	3	12.36	-
3/32	.0938	.0880	3/4	3	10.58	-
7/64	.1094	.1030	7/8	3-1/2	12.36	-
1/8	.1250	.1190	7/8	3-1/2	9.30	12.06
9/64	.1406	.1350	1	4	14.84	16.98
5/32	.1562	.1510	1	4	13.76	16.98
11/64	.1719	.1645	1-1/8	4-1/2	14.84	16.98
3/16	.1875	.1805	1-1/8	4-1/2	13.76	16.98
13/64	.2031	.1945	1-1/4	5	18.16	19.18
7/32	.2188	.2075	1-1/4	5	17.38	18.76
15/64	.2344	.2265	1-1/2	6	18.16	19.18
1/4	.2500	.2405	1-1/2	6	14.96	17.54
17/64	.2656	.2485	1-1/2	6	19.98	21.34
9/32	.2812	.2485	1-1/2	6	19.98	21.34
19/64	.2969	.2807	1-1/2	6	21.46	21.34
5/16	.3125	.2807	1-1/2	6	17.64	19.90
21/64	.3281	.2807	1-1/2	6	22.94	23.94
11/32	.3438	.2807	1-1/2	6	22.94	23.94
23/64	.3594	.3120	1-3/4	7	22.94	23.94
3/8	.3750	.3120	1-3/4	7	19.40	23.18
25/64	.3906	.3120	1-3/4	7	23.42	26.66
13/32	.4062	.3120	1-3/4	7	23.42	26.66
27/64	.4219	.3745	1-3/4	7	26.32	27.90
7/16	.4375	.3745	1-3/4	7	23.42	26.66
29/64	.4531	.3745	1-3/4	7	29.30	28.78
15/32	.4688	.3745	1-3/4	7	27.96	28.66
31/64	.4844	.4375	2	8	29.30	29.96
1/2	.5000	.4375	2	8	24.64	26.82
33/64	.5156	.4375	2	8	43.24	45.28
17/32	.5313	.4375	2	8	31.30	34.70
35/64	.5469	.4375	2	8	42.30	45.28
9/16	.5625	.4375	2	8	30.00	33.52
37/64	.5781	.4375	2	8	48.94	50.82
19/32	.5938	.4375	2	8	35.76	38.92
39/64	.6094	.5620	2-1/4	9	48.94	50.46
5/8	.6250	.5620	2-1/4	9	34.10	36.72
41/64	.6406	.5620	2-1/4	9	56.12	57.88

TOLERANCES

- 3/64 - 1/2 dia.: +.0002 -.0000"
- 33/64 - 5/8 dia.: +.0003 -.0000"
- 41/64 - 1-1/2 dia.: +.0001 -.0005"
- 1-9/16 - 2 dia.: +.0002 -.0006"

SIZE	DEC. EQUIV.	SHANK DIA.	FLUTE LENGTH	OVERALL LENGTH	FLUTE	
					STRAIGHT	HELICAL
					CRSF	CRHF
21/32	.6562	.5620	2-1/4	9	41.00	43.70
43/64	.6719	.5620	2-1/4	9	64.22	43.70
11/16	.6875	.5620	2-1/4	9	39.76	42.92
45/64	.7031	.5620	2-1/4	9	64.22	42.92
23/32	.7188	.5620	2-1/4	9	46.36	49.58
47/64	.7344	.6245	2-1/2	9-1/2	50.22	49.58
3/4	.7500	.6245	2-1/2	9-1/2	46.46	48.58
49/64	.7656	.6245	2-1/2	9-1/2	69.38	48.58
25/32	.7812	.6245	2-1/2	9-1/2	52.70	55.76
51/64	.7969	.6245	2-1/2	9-1/2	69.38	55.76
13/16	.8125	.6245	2-1/2	9-1/2	51.70	55.76
53/64	.8281	.6245	2-1/2	9-1/2	79.98	55.76
27/32	.8438	.6245	2-1/2	9-1/2	59.82	62.62
55/64	.8594	.7495	2-5/8	10	79.98	62.94
7/8	.8750	.7495	2-5/8	10	57.30	62.64
57/64	.8906	.7495	2-5/8	10	88.20	62.64
29/32	.9062	.7495	2-5/8	10	65.98	69.38
59/64	.9219	.7495	2-5/8	10	88.20	69.38
15/16	.9375	.7495	2-5/8	10	64.66	69.38
61/64	.9531	.7495	2-5/8	10	98.62	69.38
31/32	.9688	.7495	2-5/8	10	74.08	78.20
63/64	.9844	.8745	2-3/4	10-1/2	98.62	78.20
1	1.0000	.8745	2-3/4	10-1/2	70.46	78.20
1-1/32	1.0312	.8745	2-3/4	10-1/2	87.44	78.20
1-1/16	1.0625	.8745	2-3/4	10-1/2	81.74	87.98
1-3/32	1.0938	.8745	2-7/8	11	99.72	87.98
1-1/8	1.1250	.8745	2-7/8	11	87.44	96.88
1-5/32	1.1562	.8745	2-7/8	11	108.34	96.88
1-3/16	1.1875	.9995	2-7/8	11	99.72	106.62
1-1/4	1.2500	.9995	3	11-1/2	108.34	118.32
1-5/16	1.3125	.9995	3	11-1/2	129.96	129.72
1-3/8	1.3750	.9995	3-1/4	12	129.96	142.28
1-7/16	1.4375	1.2495	3-1/2	12-1/2	157.00	154.04
1-1/2	1.5000	1.2495	3-1/2	12-1/2	151.70	164.64
1-9/16	1.5625	1.2495	3-1/2	12-1/2	211.68	-
1-5/8	1.6250	1.2495	3-1/2	13	235.68	-
1-11/16	1.6875	1.2495	3-1/2	13	257.98	-
1-3/4	1.7500	1.2495	4	13-1/2	271.24	-
1-7/8	1.8750	1.5000	4	14	311.90	-
2	2.0000	1.5000	4	14	331.64	-

NUMBER OF FLUTES

- 3/64 - 5/32 dia.: 4 Flutes
- 11/64 - 39/64 dia.: 6 Flutes
- 5/8 - 1-1/32 dia.: 8 Flutes
- 1-1/16 - 1-5/16 dia.: 10 Flute
- 1-3/8 - 1-1/2 dia.: 12 Flutes
- 1-9/16 - 1-7/8 dia.: 14 Flutes
- 2" dia.: 16 Flutes

HIGH SPEED STEEL CHUCKING REAMERS - STRAIGHT SHANK

ICS

WIS

GENERAL PURPOSE

RIGHT HAND CUT



STRAIGHT FLUTE

High Speed Steel Straight Shank Straight Flute Wire Gauge and Letter Size Chucking Reamers are designed for general purpose reaming of most ferrous and non-ferrous metals. The cutting edge is ground with a 45° chamfer angle for easy hole entry. They are also known as Machine Reamers. Available in 60 piece sets (wire gauge) and 26 piece sets (letter).

Wire Gauge Sizes (Straight Shank) #1 to #60 Dia.

SIZE	DEC. EQUIV.	SHANK DIA.	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
1	.2280	.2173	1-1/2	6	CRSF#01	15.44
2	.2210	.2173	1-1/2	6	CRSF#02	15.44
3	.2130	.2075	1-1/4	5	CRSF#03	15.44
4	.2090	.2016	1-1/4	5	CRSF#04	15.44
5	.2055	.2016	1-1/4	5	CRSF#05	15.44
6	.2040	.1945	1-1/4	5	CRSF#06	15.44
7	.2010	.1945	1-1/4	5	CRSF#07	15.44
8	.1990	.1895	1-1/4	5	CRSF#08	15.44
9	.1960	.1895	1-1/4	5	CRSF#09	15.44
10	.1935	.1860	1-1/4	5	CRSF#10	15.44
11	.1910	.1860	1-1/4	5	CRSF#11	15.44
12	.1890	.1805	1-1/8	4-1/2	CRSF#12	13.12
13	.1850	.1805	1-1/8	4-1/2	CRSF#13	14.46
14	.1820	.1755	1-1/8	4-1/2	CRSF#14	14.46
15	.1800	.1755	1-1/8	4-1/2	CRSF#15	14.46
16	.1770	.1704	1-1/8	4-1/2	CRSF#16	13.12
17	.1730	.1645	1-1/8	4-1/2	CRSF#17	13.12
18	.1695	.1595	1-1/8	4-1/2	CRSF#18	12.26
19	.1660	.1595	1-1/8	4-1/2	CRSF#19	12.26
20	.1610	.1530	1-1/8	4-1/2	CRSF#20	12.26
21	.1590	.1530	1-1/8	4-1/2	CRSF#21	12.14
22	.1570	.1510	1	4	CRSF#22	12.14
23	.1549	.1460	1	4	CRSF#23	12.14
24	.1520	.1460	1	4	CRSF#24	12.14
25	.1490	.1430	1	4	CRSF#25	12.14
26	.1470	.1430	1	4	CRSF#26	12.14
27	.1440	.1350	1	4	CRSF#27	12.32
28	.1405	.1350	1	4	CRSF#28	12.32
29	.1360	.1275	1	4	CRSF#29	12.14
30	.1285	.1190	7/8	3-1/2	CRSF#30	9.20

SIZE	DEC. EQUIV.	SHANK DIA.	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
31	.1200	.1120	7/8	3-1/2	CRSF#31	10.28
32	.1160	.1120	7/8	3-1/2	CRSF#32	10.28
33	.1130	.1055	7/8	3-1/2	CRSF#33	10.28
34	.1110	.1055	7/8	3-1/2	CRSF#34	10.28
35	.1100	.1030	7/8	3-1/2	CRSF#35	10.28
36	.1055	.1030	7/8	3-1/2	CRSF#36	10.28
37	.1040	.0950	7/8	3-1/2	CRSF#37	10.28
38	.1010	.0950	7/8	3-1/2	CRSF#38	10.28
39	.0995	.0928	7/8	3-1/2	CRSF#39	10.28
40	.0980	.0928	7/8	3-1/2	CRSF#40	10.28
41	.0960	.0928	7/8	3-1/2	CRSF#41	10.28
42	.0935	.0880	3/4	3	CRSF#42	10.28
43	.0890	.0810	3/4	3	CRSF#43	10.28
44	.0860	.0810	3/4	3	CRSF#44	10.28
45	.0820	.0771	3/4	3	CRSF#45	10.28
46	.0810	.0771	3/4	3	CRSF#46	10.28
47	.0785	.0720	3/4	3	CRSF#47	10.28
48	.0760	.0720	3/4	3	CRSF#48	10.28
49	.0730	.0660	3/4	3	CRSF#49	10.28
50	.0700	.0660	3/4	3	CRSF#50	10.28
51	.0670	.0660	3/4	3	CRSF#51	11.64
52	.0635	.0585	1/2	2-1/2	CRSF#52	11.64
53	.0595	.0585	1/2	2-1/2	CRSF#53	12.14
54	.0550	.0510	1/2	2-1/2	CRSF#54	12.14
55	.0520	.0510	1/2	2-1/2	CRSF#55	12.14
56	.0465	.0455	1/2	2-1/2	CRSF#56	12.14
57	.0430	.0390	1/2	2-1/2	CRSF#57	12.14
58	.0420	.0390	1/2	2-1/2	CRSF#58	12.14
59	.0410	.0390	1/2	2-1/2	CRSF#59	12.14
60	.0400	.0390	1/2	2-1/2	CRSF#60	12.14

Letter Sizes (Straight Shank) "A" to "Z" Dia.

SIZE	DEC. EQUIV.	SHANK DIA.	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
A	.234	.2265	1-1/2	6	CRSF"A"	19.40
B	.238	.2329	1-1/2	6	CRSF"B"	19.40
C	.242	.2329	1-1/2	6	CRSF"C"	19.40
D	.246	.2329	1-1/2	6	CRSF"D"	19.40
E	.250	.2405	1-1/2	6	CRSF"E"	14.96
F	.257	.2485	1-1/2	6	CRSF"F"	13.52
G	.261	.2485	1-1/2	6	CRSF"G"	13.52
H	.266	.2485	1-1/2	6	CRSF"H"	21.76
I	.272	.2485	1-1/2	6	CRSF"I"	21.76
J	.277	.2485	1-1/2	6	CRSF"J"	21.76
K	.281	.2485	1-1/2	6	CRSF"K"	21.76
L	.290	.2792	1-1/2	6	CRSF"L"	21.76
M	.295	.2792	1-1/2	6	CRSF"M"	21.76

SIZE	DEC. EQUIV.	SHANK DIA.	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
N	.302	.2792	1-1/2	6	CRSF"N"	21.76
O	.316	.2792	1-1/2	6	CRSF"O"	23.06
P	.323	.2792	1-1/2	6	CRSF"P"	23.06
Q	.332	.2792	1-1/2	6	CRSF"Q"	23.06
R	.339	.2792	1-1/2	6	CRSF"R"	23.06
S	.348	.3105	1-3/4	7	CRSF"S"	23.06
T	.358	.3105	1-3/4	7	CRSF"T"	23.06
U	.368	.3105	1-3/4	7	CRSF"U"	23.06
V	.377	.3105	1-3/4	7	CRSF"V"	30.18
W	.386	.3105	1-3/4	7	CRSF"W"	25.82
X	.397	.3105	1-3/4	7	CRSF"X"	25.82
Y	.404	.3105	1-3/4	7	CRSF"Y"	26.60
Z	.413	.3735	1-3/4	7	CRSF"Z"	26.60

TOLERANCES

1 - #60 dia.: +.0002 - .0000" • A - Z dia.: +.0002 - .0000"

HIGH SPEED STEEL COBALT (M42) CHUCKING REAMERS

ICS WIS

HEAVY DUTY

RIGHT HAND CUT

STRAIGHT SHANK



STRAIGHT FLUTE

Cobalt Chucking Reamers are designed for reaming tough steels, stainless steel, titanium, and inconel. They can be run about 25% faster than high speed steel and produce a smoother finished hole. Tool life is increased up to 500%.

DEC. SIZE	SHANK EQUIV.	FLUTE DIA.	OVERALL LENGTH	NO. OF FLUTES	ITEM NO.	PRICE
3/64	.0469	.0455	1/2	2-1/2	4	CRSFC003 22.52
1/16	.0625	.0585	1/2	2-1/2	4	CRSFC004 22.52
5/64	.0781	.0720	3/4	3	4	CRSFC005 20.56
3/32	.0938	.0880	3/4	3	4	CRSFC006 17.82
7/64	.1094	.1030	7/8	3-1/2	4	CRSFC007 20.56
1/8	.1250	.1190	7/8	3-1/2	4	CRSFC008 15.68
9/64	.1406	.1350	1	4	4	CRSFC009 24.46
5/32	.1562	.1510	1	4	4	CRSFC010 22.08
11/64	.1719	.1645	1-1/8	4-1/2	6	CRSFC011 24.46
3/16	.1875	.1805	1-1/8	4-1/2	6	CRSFC012 21.32
13/64	.2031	.1945	1-1/4	5	6	CRSFC013 28.74
7/32	.2188	.2075	1-1/4	5	6	CRSFC014 27.50
15/64	.2344	.2265	1-1/2	6	6	CRSFC015 28.74
1/4	.2500	.2405	1-1/2	6	6	CRSFC016 34.96
17/64	.2656	.2485	1-1/2	6	6	CRSFC017 32.62
9/32	.2812	.2485	1-1/2	6	6	CRSFC018 33.88
19/64	.2969	.2792	1-1/2	6	6	CRSFC019 37.00
5/16	.3125	.2792	1-1/2	6	6	CRSFC020 30.34
21/64	.3281	.2792	1-1/2	6	6	CRSFC021 36.54
11/32	.3438	.2792	1-1/2	6	6	CRSFC022 36.54
23/64	.3594	.3105	1-3/4	7	6	CRSFC023 38.96
3/8	.3750	.3105	1-3/4	7	6	CRSFC024 33.76
25/64	.3906	.3105	1-3/4	7	6	CRSFC025 45.16

DEC. SIZE	SHANK EQUIV.	FLUTE DIA.	OVERALL LENGTH	NO. OF FLUTES	ITEM NO.	PRICE
13/32	.4062	.3105	1-3/4	7	6	CRSFC026 48.68
27/64	.4219	.3730	1-3/4	7	6	CRSFC027 51.92
7/16	.4375	.3730	1-3/4	7	6	CRSFC028 45.72
29/64	.4531	.3730	1-3/4	7	6	CRSFC029 57.72
15/32	.4688	.3730	1-3/4	7	6	CRSFC030 57.72
31/64	.4844	.4355	2	8	6	CRSFC031 57.72
1/2	.5000	.4355	2	8	6	CRSFC032 50.04
17/32	.5312	.4355	2	8	6	CRSFC034 54.70
9/16	.5625	.4355	2	8	6	CRSFC036 54.70
19/32	.5938	.4355	2	8	6	CRSFC038 54.70
5/8	.6250	.5620	2-1/4	9	8	CRSFC040 63.84
21/32	.6562	.5620	2-1/4	9	8	CRSFC042 72.18
11/16	.6875	.5620	2-1/4	9	8	CRSFC044 72.18
23/32	.7188	.5620	2-1/4	9	8	CRSFC046 80.60
3/4	.7500	.6245	2-1/2	9-1/2	8	CRSFC048 81.02
25/32	.7812	.6245	2-1/2	9-1/2	8	CRSFC050 87.36
13/16	.8125	.6245	2-1/2	9-1/2	8	CRSFC052 87.36
27/32	.8438	.6245	2-1/2	9-1/2	8	CRSFC054 103.38
7/8	.8750	.7495	2-5/8	10	8	CRSFC056 105.80
29/32	.9062	.7495	2-5/8	10	8	CRSFC058 113.96
15/16	.9375	.7495	2-5/8	10	8	CRSFC060 113.96
31/32	.9688	.7495	2-5/8	10	8	CRSFC062 127.68
1	1.000	.8745	2-3/4	10-1/2	8	CRSFC100 128.90

HIGH SPEED STEEL CHUCKING REAMERS - CARBIDE TIPPED

ICS WIS

SPECIAL PURPOSE

RIGHT HAND CUT

STRAIGHT SHANK



STRAIGHT FLUTE

Carbide Tipped Chucking Reamers are designed for reaming highly abrasive materials and sizing holes that have work-hardened. They are also used when sand or scale is encountered in reaming holes in castings and other hard metals. Tolerance is +.0003" -.0000".

DEC. SIZE	SHANK EQUIV.	FLUTE DIA.	OVERALL LENGTH	ITEM NO.	PRICE
3/16	.1875	.1805	1-1/8	4-1/2	CTCRSF012 145.90
7/32	.2188	.2075	1-1/4	5	CTCRSF014 -
1/4	.2500	.2405	1-1/2	6	CTCRSF016 -
9/32	.2812	.2485	1-1/2	6	CTCRSF018 -
5/16	.3125	.2792	1-1/2	6	CTCRSF020 -
11/32	.3438	.2792	1-1/2	6	CTCRSF022 -
3/8	.3750	.3105	1-3/4	7	CTCRSF024 58.90
13/32	.4062	.3105	1-3/4	7	CTCRSF026 61.70
7/16	.4375	.3730	1-3/4	7	CTCRSF028 65.80
15/32	.4688	.3730	1-3/4	7	CTCRSF030 67.00
1/2	.5000	.4355	2	8	CTCRSF032 72.50
9/16	.5625	.4355	2	8	CTCRSF036 78.02

DEC. SIZE	SHANK EQUIV.	FLUTE DIA.	OVERALL LENGTH	ITEM NO.	PRICE
5/8	.5625	.5620	2-1/4	9	CTCRSF040 85.70
11/16	.6875	.5620	2-1/4	9	CTCRSF044 -
3/4	.7500	.6245	2-1/2	9-1/2	CTCRSF048 90.52
13/16	.8125	.6245	2-1/2	9-1/2	CTCRSF052 93.66
7/8	.8750	.7495	2-5/8	10	CTCRSF056 97.36
15/16	.9375	.7495	2-5/8	10	CTCRSF060 -
1	1.000	.8745	2-3/4	10-1/2	CTCRSF100 119.02

* Inquire for other sizes not listed

HIGH SPEED STEEL CHUCKING REAMERS - DOWEL PIN SIZES

ICS

WIS

SPECIAL PURPOSE

RIGHT HAND CUT

STRAIGHT SHANK



STRAIGHT FLUTE

High Speed Steel Dowel Pin Size Chucking Reamers are used to size holes in preparation for installing dowel pins. Listed below are two reamer sizes that can be used for each size dowel pin, depending on how tight a pin fit is required. Diameter tolerance is $+0.0000'' -0.0002''$. They are also available in 14 piece sets.

USE FOR SIZE	DOWEL PIN	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
.1230	1/8	7/8	3-1/2	CRSFDP.1230	18.32
.1247	1/8	7/8	3-1/2	CRSFDP.1247	18.32
.1855	3/16	1-1/8	4-1/2	CRSFDP.1855	18.82
.1870	3/16	1-1/8	4-1/2	CRSFDP.1870	18.82
.2480	1/4	1-1/2	6	CRSFDP.2480	21.06
.2495	1/4	1-1/2	6	CRSFDP.2495	21.06
.3105	5/16	1-1/2	6	CRSFDP.3105	24.26

USE FOR SIZE	DOWEL PIN	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
.3120	5/16	1-1/2	6	CRSFDP.3120	24.26
.3730	3/8	1-3/4	7	CRSFDP.3730	30.18
.3745	3/8	1-3/4	7	CRSFDP.3745	30.18
.4355	7/16	1-3/4	7	CRSFDP.4355	30.18
.4370	7/16	1-3/4	7	CRSFDP.4370	30.18
.4980	1/2	2	8	CRSFDP.4980	37.52
.4995	1/2	2	8	CRSFDP.4995	37.52

HIGH SPEED STEEL CHUCKING REAMERS - OVER & UNDER SIZES

ICS

WIS

SPECIAL PURPOSE

RIGHT HAND CUT

STRAIGHT SHANK



STRAIGHT FLUTE

High Speed Steel Oversize Chucking Reamers are $+0.001''$ and Undersize Chucking Reamers are $-0.001''$ from common fractional sizes of 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, and 1/2. They are also available in 14 piece sets.

OVERSIZE REAMERS

USE FOR SIZE	FRAC. SIZE	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
.1260	1/8	7/8	3-1/2	CRSFOS.1260	18.32
.1885	3/16	1-1/8	4-1/2	CRSFOS.1885	18.82
.2510	1/4	1-1/2	6	CRSFOS.2510	21.06
.3135	5/16	1-1/2	6	CRSFOS.3135	24.26
.3760	3/8	1-3/4	7	CRSFOS.3760	30.18
.4385	7/16	1-3/4	7	CRSFOS.4385	30.18
.5010	1/2	2	8	CRSFOS.5010	37.52

UNDERSIZE REAMERS

USE FOR SIZE	FRAC. SIZE	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
.1240	1/8	7/8	3-1/2	CRSFUS.1260	18.32
.1865	3/16	1-1/8	4-1/2	CRSFUS.1885	18.82
.2490	1/4	1-1/2	6	CRSFUS.2510	21.06
.3115	5/16	1-1/2	6	CRSFUS.3135	24.26
.3740	3/8	1-3/4	7	CRSFUS.3760	30.18
.4365	7/16	1-3/4	7	CRSFUS.4385	30.18
.4990	1/2	2	8	CRSFUS.5010	37.52

CHUCKING REAMERS - STANDARD DECIMAL SIZES

ICS WIS

SPECIAL PURPOSE

RIGHT HAND CUT

STRAIGHT SHANK



STRAIGHT FLUTE

High Speed Steel Decimal Size Chucking Reamers are designed to remove a very small (.0005 to .001 inch) amount of metal when sizing a hole.

Standard Intermediate Decimal Sizes .1230 to .2830 Diameter

FLUTE SIZE	OVERALL LENGTH	NO. OF FLUTES	PRICE
SIZE	LENGTH	FLUTES	CRSFDS
.1230	7/8	3-1/2	6 18.32
.1240	7/8	3-1/2	6 18.32
.1245	7/8	3-1/2	6 18.32
.1247	7/8	3-1/2	6 18.32
.1255	7/8	3-1/2	6 18.32
.1260	7/8	3-1/2	6 18.32
.1265	7/8	3-1/2	6 18.32
.1270	7/8	3-1/2	6 18.32
.1280	7/8	3-1/2	6 18.32
.1290	7/8	3-1/2	6 18.32
.1295	7/8	3-1/2	6 18.32
.1300	7/8	3-1/2	6 18.32
.1370	1	4	6 18.82
.1375	1	4	6 18.82
.1380	1	4	6 18.82
.1400	1	4	6 18.82
.1410	1	4	6 18.82
.1415	1	4	6 18.82
.1420	1	4	6 18.82
.1520	1	4	6 18.82
.1560	1	4	6 18.82
.1580	1	4	6 18.82
.1670	1-1/8	4-1/2	6 18.82
.1720	1-1/8	4-1/2	6 18.82
.1740	1-1/8	4-1/2	6 18.82
.1750	1-1/8	4-1/2	6 18.82
.1760	1-1/8	4-1/2	6 18.82
.1770	1-1/8	4-1/2	6 18.82
.1810	1-1/8	4-1/2	6 18.82
.1820	1-1/8	4-1/2	6 18.82
.1840	1-1/8	4-1/2	6 18.82
.1845	1-1/8	4-1/2	6 18.82
.1850	1-1/8	4-1/2	6 18.82
.1855	1-1/8	4-1/2	6 18.82
.1860	1-1/8	4-1/2	6 18.82
.1865	1-1/8	4-1/2	6 18.82
.1870	1-1/8	4-1/2	6 18.82
.1875	1-1/8	4-1/2	6 18.82
.1880	1-1/8	4-1/2	6 18.82

FLUTE SIZE	OVERALL LENGTH	NO. OF FLUTES	PRICE
SIZE	LENGTH	FLUTES	CRSFDS
.1885	1-1/8	4-1/2	6 18.82
.1895	1-1/8	4-1/2	6 18.82
.1900	1-1/8	4-1/2	6 18.82
.1905	1-1/4	5	6 21.06
.1910	1-1/4	5	6 21.06
.1915	1-1/4	5	6 21.06
.1920	1-1/4	5	6 21.06
.1930	1-1/4	5	6 21.06
.1940	1-1/4	5	6 21.06
.1950	1-1/4	5	6 21.06
.1960	1-1/4	5	6 21.06
.1970	1-1/4	5	6 21.06
.1980	1-1/4	5	6 21.06
.1990	1-1/4	5	6 21.06
.2000	1-1/4	5	6 21.06
.2020	1-1/4	5	6 21.06
.2024	1-1/4	5	6 21.06
.2030	1-1/4	5	6 21.06
.2050	1-1/4	5	6 21.06
.2060	1-1/4	5	6 21.06
.2070	1-1/4	5	6 21.06
.2080	1-1/4	5	6 21.06
.2090	1-1/4	5	6 21.06
.2100	1-1/4	5	6 21.06
.2110	1-1/4	5	6 21.06
.2120	1-1/4	5	6 31.50
.2140	1-1/4	5	6 21.06
.2150	1-1/4	5	6 21.06
.2155	1-1/4	5	6 21.06
.2160	1-1/4	5	6 21.06
.2170	1-1/4	5	6 21.06
.2180	1-1/4	5	6 21.06
.2190	1-1/4	5	6 21.06
.2200	1-1/4	5	6 21.06
.2211	1-1/2	6	6 21.06
.2270	1-1/2	6	6 21.06
.2300	1-1/2	6	6 21.06
.2310	1-1/2	6	6 21.06
.2320	1-1/2	6	6 21.06

FLUTE SIZE	OVERALL LENGTH	NO. OF FLUTES	PRICE
SIZE	LENGTH	FLUTES	CRSFDS
.2340	1-1/2	6	6 21.06
.2350	1-1/2	6	6 21.06
.2360	1-1/2	6	6 21.06
.2370	1-1/2	6	6 21.06
.2380	1-1/2	6	6 21.06
.2390	1-1/2	6	6 21.06
.2400	1-1/2	6	6 21.06
.2410	1-1/2	6	6 21.06
.2420	1-1/2	6	6 21.06
.2430	1-1/2	6	6 21.06
.2440	1-1/2	6	6 21.06
.2450	1-1/2	6	6 21.06
.2460	1-1/2	6	6 21.06
.2470	1-1/2	6	6 21.06
.2475	1-1/2	6	6 21.06
.2480	1-1/2	6	6 21.06
.2485	1-1/2	6	6 21.06
.2490	1-1/2	6	6 21.06
.2495	1-1/2	6	6 21.06
.2505	1-1/2	6	6 21.06
.2510	1-1/2	6	6 21.06
.2515	1-1/2	6	6 21.06
.2520	1-1/2	6	6 21.06
.2530	1-1/2	6	6 21.06
.2540	1-1/2	6	6 21.06
.2550	1-1/2	6	6 21.06
.2560	1-1/2	6	6 21.06
.2570	1-1/2	6	6 21.06
.2580	1-1/2	6	6 21.06
.2590	1-1/2	6	6 21.06
.2600	1-1/2	6	6 21.06
.2650	1-1/2	6	6 24.26
.2690	1-1/2	6	6 24.26
.2710	1-1/2	6	6 24.26
.2760	1-1/2	6	6 24.26
.2770	1-1/2	6	6 24.26
.2800	1-1/2	6	6 24.26
.2820	1-1/2	6	6 24.26
.2830	1-1/2	6	6 24.26

For other special decimal sizes, refer to page 192 for pricing not listed.

CHUCKING REAMERS - STANDARD DECIMAL SIZES

ICS WIS

SPECIAL PURPOSE

RIGHT HAND CUT

STRAIGHT SHANK



STRAIGHT FLUTE

High Speed Steel Decimal Size Chucking Reamers are designed to remove a very small (.0005 to .001 inch) amount of metal when sizing a hole.

Standard Intermediate Decimal Sizes .2840 to .7580 Diameter

FLUTE SIZE	OVERALL LENGTH	NO. OF FLUTES	PRICE	CRSFD
.2840	1-1/2	6	24.26	
.2860	1-1/2	6	24.26	
.2870	1-1/2	6	24.26	
.2890	1-1/2	6	24.26	
.2900	1-1/2	6	24.26	
.2920	1-1/2	6	24.26	
.2930	1-1/2	6	24.26	
.2940	1-1/2	6	24.26	
.2960	1-1/2	6	24.26	
.2980	1-1/2	6	24.26	
.2990	1-1/2	6	24.26	
.3030	1-1/2	6	24.26	
.3050	1-1/2	6	24.26	
.3060	1-1/2	6	24.26	
.3070	1-1/2	6	24.26	
.3090	1-1/2	6	24.26	
.3100	1-1/2	6	24.26	
.3105	1-1/2	6	24.26	
.3110	1-1/2	6	24.26	
.3115	1-1/2	6	24.26	
.3120	1-1/2	6	24.26	
.3130	1-1/2	6	24.26	
.3135	1-1/2	6	24.26	
.3140	1-1/2	6	24.26	
.3145	1-1/2	6	24.26	
.3150	1-1/2	6	24.26	
.3160	1-1/2	6	24.26	
.3165	1-1/2	6	24.26	
.3170	1-1/2	6	24.26	
.3180	1-1/2	6	24.26	
.3190	1-1/2	6	24.26	
.3200	1-1/2	6	24.26	
.3220	1-1/2	6	24.26	
.3240	1-1/2	6	24.26	
.3250	1-1/2	6	24.26	
.3270	1-1/2	6	24.26	
.3280	1-1/2	6	24.26	
.3290	1-1/2	6	24.26	
.3300	1-1/2	6	24.26	

FLUTE SIZE	OVERALL LENGTH	NO. OF FLUTES	PRICE	CRSFD
.3360	1-1/2	6	24.26	
.3370	1-1/2	6	24.26	
.3440	1-1/2	6	24.26	
.3490	1-3/4	7	30.18	
.3490	1-3/4	7	30.18	
.3550	1-3/4	7	30.18	
.3590	1-3/4	7	30.18	
.3690	1-3/4	7	30.18	
.3730	1-3/4	7	30.18	
.3740	1-3/4	7	30.18	
.3745	1-3/4	7	30.18	
.3755	1-3/4	7	30.18	
.3760	1-3/4	7	30.18	
.3765	1-3/4	7	30.18	
.3770	1-3/4	7	30.18	
.3790	1-3/4	7	30.18	
.3800	1-3/4	7	30.18	
.3860	1-3/4	7	30.18	
.3880	1-3/4	7	30.18	
.4000	1-3/4	7	30.18	
.4070	1-3/4	7	30.18	
.4300	1-3/4	7	30.18	
.4320	1-3/4	7	30.18	
.4355	1-3/4	7	30.18	
.4365	1-3/4	7	30.18	
.4370	1-3/4	7	30.18	
.4385	1-3/4	7	30.18	
.4390	1-3/4	7	30.18	
.4410	1-3/4	7	30.18	
.4420	1-3/4	7	30.18	
.4430	1-3/4	7	30.18	
.4440	1-3/4	7	30.18	
.4480	1-3/4	7	30.18	
.4490	1-3/4	7	30.18	
.4550	1-3/4	7	30.18	
.4560	1-3/4	7	30.18	
.4820	2	8	37.52	
.4900	2	8	37.52	
.4970	2	8	37.52	

FLUTE SIZE	OVERALL LENGTH	NO. OF FLUTES	PRICE	CRSFD
.4980	2	8	37.52	
.4990	2	8	37.52	
.4995	2	8	37.52	
.5010	2	8	37.52	
.5015	2	8	37.52	
.5020	2	8	37.52	
.5030	2	8	37.52	
.5040	2	8	37.52	
.5050	2	8	37.52	
.5240	2	8	37.52	
.5250	2	8	37.52	
.5260	2	8	37.52	
.5300	2	8	37.52	
.5500	2	8	37.52	
.5580	2	8	37.52	
.5590	2	8	37.52	
.5615	2	8	37.52	
.5690	2	8	37.52	
.5740	2	8	37.52	
.5840	2	8	43.46	
.5850	2	8	43.46	
.5860	2	8	43.46	
.5880	2	8	43.46	
.6050	2-1/4	9	43.46	
.6220	2-1/4	9	43.46	
.6240	2-1/4	9	43.46	
.6250	2-1/4	9	43.46	
.6255	2-1/4	9	43.46	
.6260	2-1/4	9	43.46	
.6300	2-1/4	9	43.46	
.7480	2-1/2	9-1/2	47.94	
.7490	2-1/2	9-1/2	47.94	
.7510	2-1/2	9-1/2	47.94	
.7580	2-1/2	9-1/2	47.94	

For other special decimal sizes, refer to page 192 for pricing not listed.

HIGH SPEED STEEL

CHUCKING REAMERS - NON-STANDARD DECIMAL SIZES

ICS WIS

SPECIAL PURPOSE

RIGHT HAND CUT

STRAIGHT SHANK



STRAIGHT FLUTE

High Speed Steel Decimal Size Chucking Reamers are designed to remove a very small (.0005 to .001 inch) amount of metal when sizing a hole.

Non-Standard Decimal Sizes .0100 to 2.0000 Diameter

ITEM NO. - **CRSFDS** + DECIMAL SIZE

EX: **CRSFDS.0100**

(PLEASE INQUIRE FOR PRICING)

HIGH SPEED STEEL

METRIC CHUCKING REAMERS

ICS WIS

SPECIAL PURPOSE

RIGHT HAND CUT

STRAIGHT SHANK



STRAIGHT FLUTE

High Speed Steel Straight Shank Straight Flute Metric Size Chucking Reamers are designed for general purpose reaming of most ferrous and non-ferrous metals. The cutting edge is ground with a 45° chamfer angle for easy hole entry. They are also known as Machine Reamers.

Metric Sizes 2.00mm to 25.00mm Diameter

DEC. SIZE	FLUTE EQUIV.	OVERALL LENGTH	NO. OF FLUTES	ITEM NO.	PRICE	
2.0	.0787	3/4	3	4	CRSFM02.00	10.96
2.5	.0984	7/8	3-1/2	4	CRSFM02.50	10.96
3.0	.1181	7/8	3-1/2	4	CRSFM03.00	10.96
3.5	.1378	1	4	6	CRSFM03.50	13.78
4.0	.1575	1	4	6	CRSFM04.00	13.78
4.5	.1772	1-1/8	4-1/2	6	CRSFM04.50	13.78
5.0	.1968	1-1/4	5	6	CRSFM05.00	16.12
5.5	.2165	1-1/4	5	6	CRSFM05.50	16.12
6.0	.2362	1-1/2	6	6	CRSFM06.00	16.12
6.5	.2559	1-1/2	6	6	CRSFM06.50	17.38
7.0	.2756	1-1/2	6	6	CRSFM07.00	17.98
7.5	.2953	1-1/2	6	6	CRSFM07.50	17.98
8.0	.3150	1-1/2	6	6	CRSFM08.00	19.82
8.5	.3346	1-1/2	6	6	CRSFM08.50	19.82
9.0	.3543	1-3/4	7	6	CRSFM09.00	19.82
9.5	.3740	1-3/4	7	6	CRSFM09.50	19.82
10.0	.3937	1-3/4	7	6	CRSFM10.00	22.22
10.5	.4134	1-3/4	7	6	CRSFM10.50	22.22
11.0	.4331	1-3/4	7	6	CRSFM11.00	22.22
11.5	.4528	1-3/4	7	6	CRSFM11.50	24.70
12.0	.4724	2	8	6	CRSFM12.00	28.52
12.5	.4921	2	8	6	CRSFM12.50	23.96
13.0	.5118	2	8	6	CRSFM13.00	27.64
13.5	.5315	2	8	6	CRSFM13.50	27.64

DEC. SIZE	FLUTE EQUIV.	OVERALL LENGTH	NO. OF FLUTES	ITEM NO.	PRICE	
14.0	.5512	2	8	6	CRSFM14.00	27.64
14.5	.5709	2	8	6	CRSFM14.50	27.64
15.0	.5906	2	8	6	CRSFM14.00	30.08
15.5	.6102	2-1/4	9	6	CRSFM15.50	30.08
16.0	.6299	2-1/4	9	6	CRSFM16.00	32.24
16.5	.6496	2-1/4	9	6	CRSFM16.50	34.62
17.0	.6693	2-1/4	9	6	CRSFM17.00	36.46
17.5	.6890	2-1/4	9	6	CRSFM17.50	36.46
18.0	.7087	2-1/4	9	6	CRSFM18.00	39.64
18.5	.7283	2-1/2	9-1/2	8	CRSFM18.50	39.64
19.0	.7480	2-1/2	9-1/2	8	CRSFM19.00	45.04
19.5	.7677	2-1/2	9-1/2	8	CRSFM19.50	45.04
20.0	.7874	2-1/2	9-1/2	8	CRSFM20.00	46.46
20.5	.8071	2-1/2	9-1/2	8	CRSFM20.50	46.46
21.0	.8268	2-1/2	9-1/2	8	CRSFM21.00	50.44
21.5	.8465	2-5/8	10	8	CRSFM21.50	50.44
22.0	.8661	2-5/8	10	8	CRSFM22.00	54.10
22.5	.8858	2-5/8	10	8	CRSFM22.50	54.10
23.0	.9055	2-5/8	10	8	CRSFM23.00	55.40
23.5	.9252	2-5/8	10	8	CRSFM23.50	55.40
24.0	.9449	2-5/8	10	8	CRSFM24.00	59.28
24.5	.9646	2-5/8	10	8	CRSFM24.50	62.32
25.0	.9843	2-3/4	10-1/2	8	CRSFM25.00	67.04

TOLERANCES

M2.0 - M25.0: +.0001 - +.0005"

1/2" SHANK SILVER & DEMING REAMERS - 6" LENGTH

ICS WIS

GENERAL PURPOSE

RIGHT HAND CUT



STRAIGHT FLUTE

High Speed Steel 1/2" Shank Straight Flute Silver & Deming Reamers are designed for general purpose reaming where shorter length and extra rigidity are needed. They are ideal for Bridgeport and hand held applications. Ground with a 45° chamfer.



HELICAL FLUTE

High Speed Steel 1/2" Shank Helical Flute Silver & Deming Reamers are designed for reaming materials where additional shear is necessary and to improve chip removal in blind holes. The shorter length provides extra rigidity and strength in tough materials. Ground with a 45° chamfer.

SIZE	DEC EQUIV	FLUTE LENGTH	STRAIGHT FLUTE		HELICAL FLUTE		RECOMMENDED S&D DRILL	ITEM NO.
			ITEM NO.	PRICE	ITEM NO.	PRICE		
5/8	.6250	2-1/4	CRSFRS6L040	44.60	CRHFRS6L040	49.32	39/64	SND039
21/32	.6562	2-1/4	CRSFRS6L042	51.50	CRHFRS6L042	56.30	41/64	SND041
11/16	.6875	2-1/4	CRSFRS6L044	50.26	CRHFRS6L044	55.52	43/64	SND043
3/4	.7500	2-1/2	CRSFRS6L048	52.84	CRHFRS6L048	61.18	47/64	SND047
13/16	.8125	2-1/2	CRSFRS6L052	62.20	CRHFRS6L052	68.36	51/64	SND051
7/8	.8750	2-5/8	CRSFRS6L056	67.80	CRHFRS6L056	78.40	55/64	SND055
1	1.0000	2-3/4	CRSFRS6L100	80.96	CRHFRS6L100	90.80	63/64	SND063
1-1/8	1.1250	2-7/8	CRSFRS6L108	97.94	CRHFRS6L108	112.62	1-7/64	SND107
1-1/4	1.2500	3	CRSFRS6L116	118.84	CRHFRS6L116	134.06	1-15/64	SND115
1-3/8	1.3750	3-1/4	CRSFRS6L124	142.48	CRHFRS6L124	158.02	1-23/64	SND123
1-1/2	1.5000	3-1/2	CRSFRS6L132	164.30	CRHFRS6L132	180.40	1-31/64	SND131

NOTE: Additional sizes are available. Inquire for pricing.

1/2" SHANK SILVER & DEMING REAMER SETS

ICS WIS

PLASTIC CASE

DESCRIPTION	SIZES IN SET	ITEM NO.	PRICE
	6 PC S&D REAMER SET SIZES 5/8, 11/16, 3/4, 13/16, 7/8, 1 1/2 SHANK - STRAIGHT FLUTE REAMERS	RS-CRSFRS6L-6	369.14
	4 PC S&D REAMER SET SIZES 1-1/8, 1-1/4, 1-3/8, 1-1/2 1/2 SHANK - STRAIGHT FLUTE REAMERS	RS-CRSFRS6L-4	534.08
	6 PC S&D REAMER SET SIZES 5/8, 11/16, 3/4, 13/16, 7/8, 1 1/2 SHANK - HELICAL FLUTE REAMERS	RS-CRHFRS6L-6	414.06
	4 PC S&D REAMER SET SIZES 1-1/8, 1-1/4, 1-3/8, 1-1/2 1/2 SHANK - HELICAL FLUTE REAMERS	RS-CRHFRS6L-4	595.60

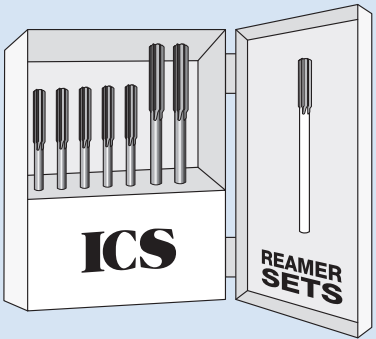
HIGH SPEED STEEL CHUCKING REAMER SETS

RT-25

STRAIGHT
SHANK

METAL INDEX

STRAIGHT
FLUTE

ILLUSTRATION	DESCRIPTION	TYPE OF REAMER	ITEM NO.	PRICE
	14 PC REAMER SETS Dowel Pin Sizes .1230 to .4995	Chuckling Reamers-SF-SS	RS-CRSFDP-14	321.54
	14 PC REAMER SETS Over & Under Sizes .1240 to .5010	Chuckling Reamers-SF-SS	RS-CRSFOU-14	321.16
	26 PC REAMER SETS Letter Sizes A to Z	Chuckling Reamers-SF-SS	RS-CRSF-26	523.78
	29 PC REAMER SETS Sizes 1/16 to 1/2 by 64ths	Chuckling Reamers-SF-SS	RS-CRSF-29	489.86
	60 PC REAMER SETS Wire Gauge Sizes 1 to 60	Chuckling Reamers-SF-SS	RS-CRSF-60	733.96

HIGH SPEED STEEL EXTRA LENGTH CHUCKING REAMERS

ICS WIS

SPECIAL PURPOSE

RIGHT HAND CUT

STRAIGHT
SHANK



STRAIGHT
FLUTE

Extra Length Chucking Reamers are designed for reaming and sizing holes in inaccessible places which cannot be reached with standard length chucking reamers. Various combinations of diameter and overall lengths are available.

SIZE	DEC	SHANK	FLUTE	12" LENGTH		16" LENGTH	
	EQUIV.	DIA.	LENGTH	OAL	ITEM NO.	OAL	ITEM NO.
1/8	.1250	.1190	7/8	12	CRSFXL008X12	16	CRSFXL008X16
5/32	.1562	.1510	1	12	CRSFXL010X12	16	CRSFXL010X16
3/16	.1875	.1805	1-1/8	12	CRSFXL012X12	16	CRSFXL012X16
7/32	.2188	.2075	1-1/4	12	CRSFXL014X12	16	CRSFXL014X16
1/4	.2500	.2405	1-1/2	12	CRSFXL016X12	16	CRSFXL016X16
9/32	.2812	.2485	1-1/2	12	CRSFXL018X12	16	CRSFXL018X16
5/16	.3125	.2807	1-1/2	12	CRSFXL020X12	16	CRSFXL020X16
11/32	.3438	.2807	1-1/2	12	CRSFXL022X12	16	CRSFXL022X16
3/8	.3750	.3120	1-3/4	12	CRSFXL024X12	16	CRSFXL024X16
13/32	.4062	.3120	1-3/4	12	CRSFXL026X12	16	CRSFXL026X16
7/16	.4375	.3745	1-3/4	12	CRSFXL028X12	16	CRSFXL028X16
15/32	.4688	.3745	1-3/4	12	CRSFXL030X12	16	CRSFXL030X16
1/2	.5000	.4375	2	12	CRSFXL032X12	16	CRSFXL032X16
17/32	.5313	.4375	2	12	CRSFXL034X12	16	CRSFXL034X16
9/16	.5625	.4375	2	12	CRSFXL036X12	16	CRSFXL036X16
19/32	.5938	.4375	2	12	CRSFXL038X12	16	CRSFXL038X16
5/8	.6250	.5620	2-1/4	12	CRSFXL040X12	16	CRSFXL040X16
21/32	.6562	.5620	2-1/4	12	CRSFXL042X12	16	CRSFXL042X16
11/16	.6875	.5620	2-1/4	12	CRSFXL044X12	16	CRSFXL044X16
23/32	.7188	.5620	2-1/4	12	CRSFXL046X12	16	CRSFXL046X16
3/4	.7500	.6245	2-1/2	12	CRSFXL048X12	16	CRSFXL048X16
13/16	.8125	.6245	2-1/2	12	CRSFXL052X12	16	CRSFXL052X16

REGARDING USAGE

Extended reamers are designed for use in drill presses, turret lathes, screw machines, etc. **They are not designed for CNC machines.** The best results are obtained with a floating type holder which permits the reamer to align itself with the hole being reamed.

**PREMIUM (10% COBALT) MICROGRAIN CARBIDE
CHUCKING REAMERS - SOLID CARBIDE**

ICS WIS

SPECIAL PURPOSE

RIGHT HAND CUT

STRAIGHT SHANK



STRAIGHT FLUTE

Solid Carbide Straight Flute Fractional Size Chucking Reamers are used for reaming abrasive materials, hard steels up to RC50, aluminum, brass, bronze and plastics. Available fractional, wire gauge, letter, metric and decimal sizes.

Fractional Sizes 1/32" to 1/2" Diameter

DEC SIZE	FLUTE EQUIV	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
1/32	.0312	1/4	1-1/2	SCCRSF002	16.36
3/64	.0469	3/8	1-1/2	SCCRSF003	18.58
1/16	.0629	3/8	1-1/2	SCCRSF004	19.66
5/64	.0781	1/2	1-3/4	SCCRSF005	21.52
3/32	.0938	1/2	2	SCCRSF006	22.90
7/64	.1094	5/8	2-1/4	SCCRSF007	23.60
1/8	.1250	5/8	2-1/4	SCCRSF008	25.30
9/64	.1406	3/4	2-1/2	SCCRSF009	27.98
5/32	.1562	3/4	2-1/2	SCCRSF010	29.14
11/64	.1719	7/8	2-3/4	SCCRSF011	33.02
3/16	.1875	7/8	2-3/4	SCCRSF012	33.64
13/64	.2031	1	3	SCCRSF013	37.56
7/32	.2188	1	3	SCCRSF014	38.66
15/64	.2344	1	3	SCCRSF015	38.72
1/4	.2500	1	3	SCCRSF016	39.92
17/64	.2656	1-1/8	3-1/4	SCCRSF017	49.94

DEC SIZE	FLUTE EQUIV	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
9/32	.2812	1-1/8	3-1/4	SCCRSF018	48.50
19/64	.2969	1-1/8	3-1/4	SCCRSF019	53.34
5/16	.3125	1-1/8	3-1/4	SCCRSF020	54.98
21/64	.3281	1-1/4	3-1/2	SCCRSF021	63.10
11/32	.3438	1-1/4	3-1/2	SCCRSF022	61.26
23/64	.3594	1-1/4	3-1/2	SCCRSF023	70.76
3/8	.3750	1-1/4	3-1/2	SCCRSF024	68.68
25/64	.3906	1-1/4	3-1/2	SCCRSF025	85.94
13/32	.4062	1-1/4	3-1/2	SCCRSF026	81.30
27/64	.4219	1-3/8	4	SCCRSF027	100.22
7/16	.4375	1-3/8	4	SCCRSF028	91.52
29/64	.4531	1-3/8	4	SCCRSF029	108.14
15/32	.4688	1-3/8	4	SCCRSF030	104.62
31/64	.4844	1-1/2	4	SCCRSF031	121.34
1/2	.5000	1-1/2	4	SCCRSF032	119.28

Letter Sizes "A" to "Z" Diameter

DEC SIZE	FLUTE EQUIV	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
A	.2340	1	3	SCCRSF"A"	42.44
B	.2380	1	3	SCCRSF"B"	42.44
C	.2420	1	3	SCCRSF"C"	41.18
D	.2460	1	3	SCCRSF"D"	41.18
E	.2500	1-1/8	3-1/4	SCCRSF"E"	39.92
F	.2570	1-1/8	3-1/4	SCCRSF"F"	51.50
G	.2610	1-1/8	3-1/4	SCCRSF"G"	51.50
H	.2660	1-1/8	3-1/4	SCCRSF"H"	53.10
I	.2720	1-1/8	3-1/4	SCCRSF"I"	53.10
J	.2770	1-1/8	3-1/4	SCCRSF"J"	51.50
K	.2810	1-1/8	3-1/4	SCCRSF"K"	51.50
L	.2900	1-1/8	3-1/4	SCCRSF"L"	56.72
M	.2950	1-1/8	3-1/4	SCCRSF"M"	58.42

DEC SIZE	FLUTE EQUIV	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
N	.3020	1-1/8	3-1/4	SCCRSF"N"	56.72
O	.3160	1-1/8	3-1/4	SCCRSF"O"	67.90
P	.3230	1-1/4	3-1/2	SCCRSF"P"	67.90
Q	.3320	1-1/4	3-1/2	SCCRSF"Q"	65.88
R	.3390	1-1/4	3-1/2	SCCRSF"R"	67.90
S	.3480	1-1/4	3-1/2	SCCRSF"S"	72.98
T	.3580	1-1/4	3-1/2	SCCRSF"T"	72.98
U	.3680	1-1/4	3-1/2	SCCRSF"U"	75.20
V	.3770	1-1/4	3-1/2	SCCRSF"V"	83.86
W	.3860	1-1/4	3-1/2	SCCRSF"W"	83.86
X	.3970	1-1/4	3-1/2	SCCRSF"X"	87.00
Y	.4040	1-1/4	3-1/2	SCCRSF"Y"	83.86
Z	.4130	1-1/4	3-1/2	SCCRSF"Z"	100.22

NUMBER OF FLUTES
 .0280 - .2500 dia.: 4 Flutes
 .2501 - .5000 dia.: 6 Flutes

DIAMETER	DIAMETER TOLERANCES
.0280 to .2500	+0000 / +.0002
.2501 to .5000	+0000 / +.0003

CHUCKING REAMERS - SOLID CARBIDE

RT-27

ICS WIS

SPECIAL PURPOSE

RIGHT HAND CUT

STRAIGHT SHANK



STRAIGHT FLUTE

Solid Carbide Chucking Reamers are used for reaming abrasive materials, hard steels up to RC50, aluminum, brass, bronze and plastics. Available fractional, wire gauge, letter, metric and decimal sizes.

Wire Gauge Sizes #1 to #70 Diameter

SIZE	DEC EQUIV	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
1	.2280	1	3	SCCRSF#01	42.44
2	.2210	1	3	SCCRSF#02	39.92
3	.2130	1	3	SCCRSF#03	41.14
4	.2090	1	3	SCCRSF#04	41.14
5	.2055	1	3	SCCRSF#05	39.92
6	.2040	1	3	SCCRSF#06	41.14
7	.2010	1	3	SCCRSF#07	39.92
8	.1990	1	3	SCCRSF#08	39.92
9	.1960	1	3	SCCRSF#09	41.14
10	.1935	1	3	SCCRSF#10	39.92
11	.1910	7/8	2-3/4	SCCRSF#11	39.92
12	.1890	7/8	2-3/4	SCCRSF#12	36.88
13	.1850	7/8	2-3/4	SCCRSF#13	35.76
14	.1820	7/8	2-3/4	SCCRSF#14	35.76
15	.1800	7/8	2-3/4	SCCRSF#15	36.88
16	.1770	7/8	2-3/4	SCCRSF#16	36.88
17	.1730	7/8	2-3/4	SCCRSF#17	39.92
18	.1695	7/8	2-3/4	SCCRSF#18	34.02
19	.1660	7/8	2-3/4	SCCRSF#19	35.06
20	.1610	7/8	2-3/4	SCCRSF#20	35.06
21	.1590	3/4	2-1/2	SCCRSF#21	30.00
22	.1570	3/4	2-1/2	SCCRSF#22	30.94
23	.1549	3/4	2-1/2	SCCRSF#23	30.00
24	.1520	3/4	2-1/2	SCCRSF#24	30.94
25	.1490	3/4	2-1/2	SCCRSF#25	30.94
26	.1470	3/4	2-1/2	SCCRSF#26	30.94
27	.1440	3/4	2-1/2	SCCRSF#27	30.00
28	.1405	3/4	2-1/2	SCCRSF#28	30.00
29	.1360	3/4	2-1/2	SCCRSF#29	30.94
30	.1285	5/8	2-1/4	SCCRSF#30	27.72
31	.1200	5/8	2-1/4	SCCRSF#31	26.92
32	.1160	5/8	2-1/4	SCCRSF#32	26.92
33	.1130	5/8	2-1/4	SCCRSF#33	25.18
34	.1110	5/8	2-1/4	SCCRSF#34	25.94
35	.1100	5/8	2-1/4	SCCRSF#35	25.18

SIZE	DEC EQUIV	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
36	.1055	5/8	2-1/4	SCCRSF#36	25.94
37	.1040	5/8	2-1/4	SCCRSF#37	25.18
38	.1010	5/8	2-1/4	SCCRSF#38	25.94
39	.0995	5/8	2-1/4	SCCRSF#39	25.18
40	.0980	5/8	2-1/4	SCCRSF#40	25.94
41	.0960	1/2	2	SCCRSF#41	25.18
42	.0935	1/2	2	SCCRSF#42	24.30
43	.0890	1/2	2	SCCRSF#43	23.56
44	.0860	1/2	2	SCCRSF#44	23.56
45	.0820	1/2	2	SCCRSF#45	24.30
46	.0810	1/2	1-3/4	SCCRSF#46	23.56
47	.0785	1/2	1-3/4	SCCRSF#47	22.90
48	.0760	1/2	1-3/4	SCCRSF#48	22.22
49	.0730	1/2	1-3/4	SCCRSF#49	22.90
50	.0700	1/2	1-3/4	SCCRSF#50	22.90
51	.0670	1/2	1-3/4	SCCRSF#51	22.22
52	.0635	3/8	1-1/2	SCCRSF#52	20.30
53	.0595	3/8	1-1/2	SCCRSF#53	20.90
54	.0550	3/8	1-1/2	SCCRSF#54	20.30
55	.0520	3/8	1-1/2	SCCRSF#55	20.08
56	.0465	3/8	1-1/2	SCCRSF#56	19.76
57	.0430	3/8	1-1/2	SCCRSF#57	19.76
58	.0420	3/8	1-1/2	SCCRSF#58	19.16
59	.0410	1/4	1-1/2	SCCRSF#59	19.16
60	.0400	1/4	1-1/2	SCCRSF#60	19.76
61	.0390	1/4	1-1/2	SCCRSF#61	19.46
62	.0380	1/4	1-1/2	SCCRSF#62	18.70
63	.0370	1/4	1-1/2	SCCRSF#63	18.14
64	.0360	1/4	1-1/2	SCCRSF#64	18.70
65	.0350	1/4	1-1/2	SCCRSF#65	17.00
66	.0330	1/4	1-1/2	SCCRSF#66	17.00
67	.0320	1/4	1-1/2	SCCRSF#67	16.86
68	.0310	1/4	1-1/2	SCCRSF#68	20.24
69	.0292	1/4	1-1/2	SCCRSF#69	20.24
70	.0280	1/4	1-1/2	SCCRSF#70	20.24

Metric Sizes 1.0mm to 12.5mm Diameter

SIZE	DEC EQUIV	FLUTE LENGTH	OVERALL LENGTH	NO. OF FLUTES	ITEM NO.	PRICE
1.0	.0395	1/4	1-1/2	4	SCCRSFM01.00	19.46
1.5	.0610	3/8	1-1/2	4	SCCRSFM01.50	20.98
2.0	.0787	1/2	1-3/4	4	SCCRSFM02.00	23.30
2.5	.0984	5/8	2-1/4	4	SCCRSFM02.50	26.50
3.0	.1181	5/8	2-1/4	4	SCCRSFM03.00	27.04
3.5	.1378	3/4	2-1/2	6	SCCRSFM03.50	30.70
4.0	.1575	3/4	2-1/2	6	SCCRSFM04.00	30.94
4.5	.1772	7/8	2-3/4	6	SCCRSFM04.50	37.46
5.0	.1968	1	3	6	SCCRSFM05.00	40.84
5.5	.2165	1	3	6	SCCRSFM05.50	49.60
6.0	.2362	1	3	6	SCCRSFM06.00	42.32
6.5	.2559	1-1/8	3-1/4	6	SCCRSFM06.50	52.26

SIZE	DEC EQUIV	FLUTE LENGTH	OVERALL LENGTH	NO. OF FLUTES	ITEM NO.	PRICE
7.0	.2756	1-1/8	3-1/4	6	SCCRSFM07.00	51.24
7.5	.2953	1-1/8	3-1/4	6	SCCRSFM07.50	60.72
8.0	.3150	1-1/8	3-1/4	6	SCCRSFM08.00	67.50
8.5	.3346	1-1/4	3-1/2	6	SCCRSFM08.50	70.20
9.0	.3543	1-1/4	3-1/2	6	SCCRSFM09.00	72.74
9.5	.3740	1-1/4	3-1/2	6	SCCRSFM09.50	78.66
10.0	.3937	1-1/4	3-1/2	6	SCCRSFM10.00	91.82
10.5	.4134	1-1/4	3-1/2	6	SCCRSFM10.50	107.40
11.0	.4331	1-3/8	4	6	SCCRSFM11.00	111.66
11.5	.4528	1-3/8	4	6	SCCRSFM11.50	114.88
12.0	.4724	1-3/8	4	6	SCCRSFM12.00	113.22
12.5	.4921	1-1/2	4	6	SCCRSFM12.50	129.26

NUMBER OF FLUTES

.0280 - .2500 dia.: 4 Flutes
.2501 - .5000 dia.: 6 Flutes

DIAMETER

.0280 to .2500
.2501 to .5000

DIAMETER TOLERANCES

+0000 / +.0002
+0000 / +.0003

HIGH SPEED STEEL TAPER SHANK CHUCKING REAMERS

ICS USA
GENERAL PURPOSE
RIGHT HAND CUT

STRAIGHT FLUTE

High Speed Steel Straight Flute Taper Shank Chucking Reamers are designed for general purpose reaming of most ferrous and non-ferrous metals. The cutting edge is ground with a 45° chamfer angle for easy hole entry. They are also known as Machine Reamers.


HELICAL FLUTE

High Speed Steel Helical Flute Taper Shank Chucking Reamers are designed for reaming materials where additional shear is necessary and to improve chip removal in blind holes. The cutting edge is ground with a 45° chamfer angle for easy hole entry. They are also known as Machine Reamers.

SIZE	DEC EQUIV	FLUTE LENGTH	OVERALL LENGTH	MORSE TAPER	STRAIGHT FLUTE		HELICAL FLUTE	
					ITEM NO.	PRICE	ITEM NO.	PRICE
1/4	.2500	1-1/2	6	1	TSCRSF016	32.86	TSCRHF016	40.18
9/32	.2812	1-1/2	6	1	TSCRSF018	40.18	TSCRHF018	43.26
5/16	.3125	1-1/2	6	1	TSCRSF020	40.18	TSCRHF020	43.26
11/32	.3438	1-1/2	6	1	TSCRSF022	40.70	TSCRHF022	43.26
3/8	.3750	1-3/4	6	1	TSCRSF024	41.48	TSCRHF024	44.32
13/32	.4062	1-3/4	6	1	TSCRSF026	42.38	TSCRHF026	45.58
7/16	.4375	1-3/4	7	1	TSCRSF028	42.38	TSCRHF028	45.58
15/32	.4688	1-3/4	7	1	TSCRSF030	47.26	TSCRHF030	48.06
1/2	.5000	2	8	1	TSCRSF032	48.06	TSCRHF032	53.02
17/32	.5312	2	8	1	TSCRSF034	51.98	TSCRHF034	54.88
9/16	.5629	2	8	1	TSCRSF036	51.98	TSCRHF036	58.02
19/32	.5938	2	8	1	TSCRSF038	56.18	TSCRHF038	58.02
5/8	.6250	2-1/4	9	2	TSCRSF040	58.02	TSCRHF040	72.72
21/32	.6562	2-1/4	9	2	TSCRSF042	59.86	TSCRHF042	72.72
11/16	.6875	2-1/4	9	2	TSCRSF044	59.86	TSCRHF044	72.72
23/32	.7188	2-1/4	9	2	TSCRSF046	68.22	TSCRHF046	72.72
3/4	.7500	2-1/2	9-1/2	2	TSCRSF048	72.72	TSCRHF048	81.12
25/32	.7812	2-1/2	9-1/2	2	TSCRSF050	74.40	TSCRHF050	81.12
13/16	.8125	2-1/2	9-1/2	2	TSCRSF052	74.40	TSCRHF052	89.26
27/32	.8438	2-1/2	9-1/2	2	TSCRSF054	88.20	TSCRHF054	92.86
7/8	.8750	2-5/8	10	2	TSCRSF056	92.92	TSCRHF056	99.22
29/32	.9062	2-5/8	10	2	TSCRSF058	96.08	TSCRHF058	101.54
15/16	.9375	2-5/8	10	3	TSCRSF060	109.20	TSCRHF060	127.32
31/32	.9688	2-5/8	10	3	TSCRSF062	115.78	TSCRHF062	127.32
1	1.0000	2-3/4	10-1/2	3	TSCRSF100	115.78	TSCRHF100	127.32
1-1/32	1.0312	2-3/4	10-1/2	3	TSCRSF102	123.90	TSCRHF102	138.08
1-1/16	1.0625	2-3/4	10-1/2	3	TSCRSF104	115.78	TSCRHF104	127.32
1-1/8	1.1250	2-7/8	11	3	TSCRSF108	127.32	TSCRHF108	140.46
1-5/32	1.1562	2-7/8	11	3	TSCRSF110	151.20	TSCRHF110	166.96
1-3/16	1.1875	2-7/8	11	3	TSCRSF112	140.46	TSCRHF112	154.10
1-1/4	1.2500	3	11-1/2	4	TSCRSF116	165.12	TSCRHF116	188.48
1-5/16	1.3125	3	11-1/2	4	TSCRSF120	175.36	TSCRHF120	188.48
1-3/8	1.3750	3-1/4	12	4	TSCRSF124	185.08	TSCRHF124	195.82
1-7/16	1.4375	3-1/4	12	4	TSCRSF128	200.02	TSCRHF128	221.30
1-1/2	1.5000	3-1/2	12-1/2	4	TSCRSF132	214.72	TSCRHF132	237.06
1-3/4	1.7500	4	13-1/2	4	TSCRSF148	310.28	TSCRHF148	325.50
2	2.0000	4	14-1/2	4	TSCRSF200	385.88	TSCRHF200	404.26

Other sizes are available. Please inquire for price and delivery.

TOLERANCES

3/64 - 1/2 dia.: +.0002 -.0000"
 33/64 - 5/8 dia.: +.0003 -.0000"
 41/64 - 1-1/2 dia.: +.0001 -.0005"
 1-9/16 - 2 dia.: +.0002 -.0006"

NUMBER OF FLUTES

3/64 - 5/32 dia.: 4 Flutes
 11/64 - 39/64 dia.: 6 Flutes
 5/8 - 1-1/32 dia.: 8 Flutes
 1-1/16 - 1-5/16 dia.: 10 Flutes
 1-3/8 - 1-1/2 dia.: 12 Flutes
 1-9/16 - 1-7/8 dia.: 14 Flutes
 2" dia.: 16 Flutes

HIGH SPEED STEEL CHUCKING REAMERS - EXPANSION

ICS USA

GENERAL PURPOSE

RIGHT HAND CUT



STRAIGHT SHANK - STRAIGHT FLUTE

TAPER SHANK - STRAIGHT FLUTE

High Speed Steel Expansion Chucking Reamers are designed to maintain the initial size by compensating for wear on the cutting end. When the reamer has been worn undersize, it may be expanded oversize by tightening the adjusting screw then reground to size and resharpened on the bevel cutting lead. They should not be considered an adjustable reamer to provide holes of different sizes.

SIZE	DEC EQUIV	FLUTE LENGTH	OVERALL LENGTH	STRAIGHT FLUTE		TAPER SHANK		
				ITEM NO.	PRICE	MORSE TAPER	ITEM NO.	PRICE
3/8	.3750	3/4	7	XCRSFSS024	51.12	1	XCRSFSS024	58.60
13/32	.4062	3/4	7	XCRSFSS026	54.46	1	XCRSFSS026	62.04
7/16	.4375	7/8	7	XCRSFSS028	54.46	1	XCRSFSS028	62.04
15/32	.4688	7/8	7	XCRSFSS030	56.56	1	XCRSFSS030	63.52
1/2	.5000	1	8	XCRSFSS032	57.54	1	XCRSFSS032	64.76
17/32	.5312	1	8	XCRSFSS034	59.98	1	XCRSFSS034	67.36
9/16	.5625	1-1/8	8	XCRSFSS036	60.42	1	XCRSFSS036	66.14
19/32	.5938	1-1/8	8	XCRSFSS038	61.34	1	XCRSFSS038	68.54
5/8	.6250	1-1/4	9	XCRSFSS040	63.22	2	XCRSFSS040	71.00
21/32	.6562	1-1/4	9	XCRSFSS042	65.74	2	XCRSFSS042	72.96
11/16	.6875	1-1/4	9	XCRSFSS044	66.20	2	XCRSFSS044	73.40
23/32	.7188	1-1/4	9	XCRSFSS046	70.48	2	XCRSFSS046	78.30
3/4	.7500	1-3/8	9-1/2	XCRSFSS048	72.92	2	XCRSFSS048	80.76
25/32	.7812	1-3/8	9-1/2	XCRSFSS050	77.20	2	XCRSFSS050	84.42
13/16	.8125	1-3/8	9-1/2	XCRSFSS052	80.16	2	XCRSFSS052	85.68
27/32	.8438	1-3/8	9-1/2	XCRSFSS054	84.44	2	XCRSFSS054	90.68
7/8	.8750	1-1/2	10	XCRSFSS056	86.86	2	XCRSFSS056	94.26
29/32	.9062	1-1/2	10	XCRSFSS058	90.56	2	XCRSFSS058	99.16
15/16	.9375	1-1/2	10	XCRSFSS060	94.78	3	XCRSFSS060	101.64
31/32	.9688	1-1/2	10	XCRSFSS062	99.06	3	XCRSFSS062	105.90
1	1.0000	1-5/8	10-1/2	XCRSFSS100	104.50	3	XCRSFSS100	112.02
1-1/16	1.0312	1-5/8	10-1/2	XCRSFSS104	115.50	3	XCRSFSS104	121.88
1-1/8	1.1250	1-3/4	11	XCRSFSS108	126.40	3	XCRSFSS108	131.70
1-3/16	1.1875	1-3/4	11	XCRSFSS112	133.12	3	XCRSFSS112	142.62
1-1/4	1.2500	1-7/8	11-1/2	XCRSFSS116	143.48	4	XCRSFSS116	154.96
1-5/16	1.3125	1-7/8	11-1/2	XCRSFSS120	148.26	4	XCRSFSS120	161.02
1-3/8	1.3750	2	12	XCRSFSS124	153.72	4	XCRSFSS124	167.68
1-7/16	1.4375	2	12	XCRSFSS128	159.82	4	XCRSFSS128	177.52
1-1/2	1.5000	2-1/8	12-1/2	XCRSFSS132	166.56	4	XCRSFSS132	183.60
1-9/16	1.5625	2-1/8	12-1/2	XCRSFSS136	225.22	4	XCRSFSS136	246.02
1-5/8	1.6250	2-1/4	13	XCRSFSS140	228.70	4	XCRSFSS140	249.48
1-11/16	1.6875	2-1/4	13	XCRSFSS144	242.56	4	XCRSFSS144	263.34
1-3/4	1.7500	2-3/8	13-1/2	XCRSFSS148	275.82	5	XCRSFSS148	303.54
1-13/16	1.8125	2-3/8	13-1/2	XCRSFSS152	294.52	5	XCRSFSS152	325.72
1-7/8	1.8750	2-1/2	14	XCRSFSS156	332.64	5	XCRSFSS156	363.82
1-15/16	1.9375	2-1/2	14	XCRSFSS160	341.26	5	XCRSFSS160	367.50
2	2.0000	2-1/2	14	XCRSFSS200	349.96	5	XCRSFSS200	384.62
2-1/8	2.1250	2-3/4	14			5	XCRSFSS208	460.84
2-1/4	2.2500	2-3/4	14-1/2			5	XCRSFSS216	483.00
2-3/8	2.3750	2-3/4	15			5	XCRSFSS224	519.76
2-1/2	2.5000	3	15			5	XCRSFSS232	550.94
3	3.0000	3	15			5	XCRSFSS300	1036.04

Maximum expansion to 1/2" - approximately .006, to 1" - approximately .010
 Maximum expansion to 1-1/2" - approximately .012, to 3" - approximately .015

MACHINE REAMERS - TAPER SHANK - EXTRA LONG

ICS WIS

SPECIAL PURPOSE

RIGHT HAND CUT

LONG
BODYLEFT HAND
FLUTE 7°-10°

High Speed Steel Extra Long Fluted Machine Reamers are designed to fill the needs of users requiring a machine reamer with extra long flutes to ream materials where additional shear is needed. They are manufactured with a 7° - 10° left hand spiral flute and 45° bevel lead for machine use for holes to H7 tolerance.

SIZE	DEC EQUIV	MORSE TAPER SHANK	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.
3/16	.1875	1	4-13/16	8	MRHFTSXL012X08
7/32	.2188	1	4-13/16	8	MRHFTSXL014X08
1/4	.2500	1	4-13/16	8	MRHFTSXL016X08
1/4	.2500	1	6-13/16	10	MRHFTSXL016X10
9/32	.2812	1	4-13/16	8	MRHFTSXL018X08
5/16	.3125	1	4-13/16	8	MRHFTSXL020X08
5/16	.3125	1	6-13/16	10	MRHFTSXL020X10
5/16	.3125	1	8-13/16	12	MRHFTSXL020X12
11/32	.3438	1	4-13/16	8	MRHFTSXL022X08
3/8	.3750	1	4-13/16	8	MRHFTSXL024X08
3/8	.3750	1	6-13/16	10	MRHFTSXL024X10
3/8	.3750	1	8-13/16	12	MRHFTSXL024X12
7/16	.4219	1	4-13/16	8	MRHFTSXL028X08
7/16	.4219	1	6-13/16	10	MRHFTSXL028X10
7/16	.4219	1	8-13/16	12	MRHFTSXL028X12
1/2	.5000	1	4-13/16	8	MRHFTSXL032X08
1/2	.5000	1	6-13/16	10	MRHFTSXL032X10
1/2	.5000	1	8-13/16	12	MRHFTSXL032X12
9/16	.5625	2	8-1/16	12	MRHFTSXL036X12
5/8	.6250	2	8-1/16	12	MRHFTSXL040X12
5/8	.6250	2	11-1/16	15	MRHFTSXL040X15
11/16	.6875	2	8-1/16	12	MRHFTSXL044X12
3/4	.7500	2	8-1/16	12	MRHFTSXL048X12
3/4	.7500	2	11-1/16	15	MRHFTSXL048X15
25/32	.7812	2	8-1/16	12	MRHFTSXL050X12
13/16	.8125	2	8-1/16	12	MRHFTSXL052X12
7/8	.8750	2	11-1/16	15	MRHFTSXL056X15
7/8	.8750	2	14-1/16	18	MRHFTSXL056X18
1	1.0000	3	10-1/4	15	MRHFTSXL100X15
1	1.0000	3	13-1/4	18	MRHFTSXL100X18
1-1/8	1.1250	3	10-1/4	15	MRHFTSXL108X15
1-1/4	1.2500	3	10-1/4	15	MRHFTSXL116X15
1-1/4	1.2500	3	13-1/4	18	MRHFTSXL116X18
1-3/8	1.3750	4	12-1/8	18	MRHFTSXL124X18
1-1/2	1.5000	4	12-1/8	18	MRHFTSXL132X18

NOTE: Other sizes and lengths can be made to order. Quantity will determine price. Inquire for quote and lead time.

HIGH SPEED STEEL METRIC MACHINE REAMERS - TAPER SHANK - EXTRA LONG

ICS WIS

SPECIAL PURPOSE

RIGHT HAND CUT

LONG
BODYLEFT HAND
FLUTE 7°-10°

High Speed Steel Extra Long Fluted Metric Machine Reamers are designed to fill the needs of users requiring a machine reamer with extra long flutes to ream materials where additional shear is needed. They are manufactured with a 7° - 10° left hand spiral flute and 45° bevel lead for machine use for holes to H7 tolerance.

SIZE mm	DEC EQUIV	MORSE TAPER SHANK	FLUTE LENGTH (mm)	OVERALL LENGTH (mm)	ITEM NO.
5.50mm	.2165	1	120mm	200mm	MRHFTSM055X200
6.00mm	.2362	1	120mm	200mm	MRHFTSM060X200
6.50mm	.2559	1	120mm	200mm	MRHFTSM065X200
7.00mm	.2756	1	120mm	200mm	MRHFTSM070X200
8.00mm	.3150	1	120mm	200mm	MRHFTSM080X200
8.00mm	.3150	1	170mm	250mm	MRHFTSM080X250
8.00mm	.3150	1	220mm	300mm	MRHFTSM080X300
8.50mm	.3346	1	120mm	200mm	MRHFTSM085X200
9.00mm	.3543	1	120mm	200mm	MRHFTSM090X200
10.00mm	.3937	1	120mm	200mm	MRHFTSM100X200
10.00mm	.3937	1	170mm	250mm	MRHFTSM100X250
10.00mm	.3937	1	220mm	300mm	MRHFTSM100X300
11.00mm	.4331	1	120mm	200mm	MRHFTSM110X200
12.00mm	.4724	1	120mm	200mm	MRHFTSM120X200
12.00mm	.4724	1	170mm	250mm	MRHFTSM120X250
12.00mm	.4724	1	220mm	300mm	MRHFTSM120X300
13.00mm	.5118	1	170mm	250mm	MRHFTSM130X250
14.00mm	.5512	1	170mm	250mm	MRHFTSM140X250
14.00mm	.5512	1	270mm	350mm	MRHFTSM140X350
15.00mm	.5512	2	122mm	220mm	MRHFTSM150X220
16.00mm	.6299	2	150mm	250mm	MRHFTSM160X250
16.00mm	.6299	2	200mm	300mm	MRHFTSM160X300
16.00mm	.6299	2	300mm	400mm	MRHFTSM160X400
17.00mm	.6693	2	200mm	300mm	MRHFTSM170X300
18.00mm	.7087	2	200mm	300mm	MRHFTSM180X300
19.00mm	.7480	2	200mm	300mm	MRHFTSM190X300
19.00mm	.7480	2	300mm	400mm	MRHFTSM190X400
19.50mm	.7677	2	150mm	250mm	MRHFTSM195X250
19.50mm	.7677	2	200mm	300mm	MRHFTSM195X300
20.00mm	.7844	2	200mm	300mm	MRHFTSM200X300
20.00mm	.7844	2	250mm	350mm	MRHFTSM200X350
20.00mm	.7844	2	300mm	400mm	MRHFTSM200X400
22.00mm	.8661	2	200mm	300mm	MRHFTSM220X300
24.00mm	.9449	3	223mm	350mm	MRHFTSM240X350
25.00mm	.9843	3	223mm	350mm	MRHFTSM250X350
25.00mm	.9843	3	273mm	400mm	MRHFTSM250X400
26.00mm	1.0433	3	273mm	400mm	MRHFTSM260X400
28.00mm	1.1024	3	273mm	400mm	MRHFTSM280X400
30.00mm	1.1811	3	223mm	350mm	MRHFTSM300X350
30.00mm	1.1811	3	273mm	400mm	MRHFTSM300X400
32.00mm	1.2598	4	245mm	400mm	MRHFTSM320X400
35.00mm	1.3780	4	195mm	350mm	MRHFTSM350X350
35.00mm	1.3780	4	245mm	400mm	MRHFTSM350X400
38.00mm	1.4961	4	245mm	400mm	MRHFTSM380X400
40.00mm	1.5748	4	245mm	400mm	MRHFTSM400X400
50.00mm	1.9865	4	245mm	400mm	MRHFTSM500X400

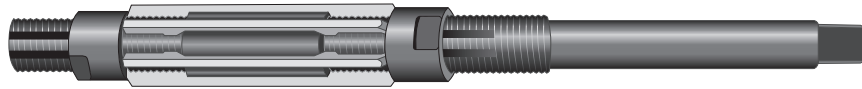
NOTE: Other sizes and lengths can be made to order. Quantity will determine price. Inquire for quote and lead time.

HIGH SPEED STEEL ADJUSTABLE HAND REAMERS

ICS WIS

GENERAL PURPOSE

RIGHT HAND CUT



High Speed Steel Adjustable Hand Reamers are designed with enough of an adjustment range to ream almost any odd size hole encountered in reaming. The blades are made of high speed steel for long life and can be adjusted by loosening one nut while tightening the other. They are used mostly for repair work in the field. They are also known as Adjustable King Pin Reamers. Ends are center drilled so blades can be sharpened in place.

INDUSTRY SIZE	RANGE OF ADJUSTMENT		BLADE LENGTH	OVERALL LENGTH	NO. OF BLADES	ITEM NO.	PRICE
	FRACTIONAL	METRIC					
8A	1/4 to 9/32	6.30mm to 7.14mm	1-11/32	3-1/4	4	AHR016	37.46
7A	9/32 to 5/16	7.14mm to 7.93mm	1-11/32	3-1/2	4	AHR018	37.46
6A	5/16 to 11/32	7.93mm to 8.73mm	1-1/2	4-1/8	4	AHR020	36.32
5A	11/32 to 3/8	8.73mm to 9.52mm	1-1/2	4-3/8	4	AHR022	36.32
4A	3/8 to 13/32	9.52mm to 10.31mm	1-1/2	4-3/4	4	AHR024	36.32
3A	13/32 to 7/16	10.31mm to 11.11mm	1-1/2	5	6	AHR026	36.32
2A	7/16 to 15/32	11.11mm to 11.90mm	1-5/8	5-1/4	6	AHR028	36.32
A	15/32 to 17/32	11.90mm to 13.49mm	1-5/8	5-1/2	6	AHR030	37.04
B	17/32 to 19/32	13.49mm to 15.08mm	1-13/16	5-3/4	6	AHR034	39.36
C	19/32 to 21/32	15.08mm to 16.66mm	2-1/16	6-1/2	7	AHR038	40.88
D	21/32 to 23/32	16.66mm to 18.25mm	2-3/16	6-3/4	7	AHR042	42.40
E	23/32 to 25/32	18.25mm to 19.84mm	2-1/2	7	7	AHR046	44.66
F	25/32 to 27/32	19.84mm to 21.43mm	2-5/8	7-3/8	7	AHR050	46.70
G	27/32 to 15/16	21.43mm to 23.81mm	3	8	7	AHR054	50.70
H	15/16 to 1-1/16	23.81mm to 26.98mm	3-1/4	9	7	AHR060	56.74
I	1-1/16 to 1-3/16	26.98mm to 30.16mm	3-3/8	10	7	AHR104	79.44
J	1-3/16 to 1-11/32	30.16mm to 34.13mm	3-7/8	11	7	AHR112	86.98
K	1-11/32 to 1-1/2	34.13mm to 38.10mm	4-1/4	12	7	AHR122	109.68
L	1-1/2 to 1-13/16	38.10mm to 46.03mm	4-7/16	14	7	AHR132	162.72
M	1-13/16 to 2-7/32	46.03mm to 56.35mm	5	16	7	AHR152	234.56
N	2-7/32 to 2-3/4	56.35mm to 69.85mm	4-13/16	18	7	AHR214	423.36
O	2-3/4 to 3-11/32	69.85mm to 84.93mm	5-3/16	20	7	AHR248	529.20

ADJUSTABLE HAND REAMER SETS

ICS WIS

PLASTIC CASE

RIGHT HAND CUT

ILLUSTRATION	DESCRIPTION	ITEM NO.	PRICE
	4 PC SET Sizes 8A to 5A	RS-AHR-4	232.42
	8 PC SET Sizes A to H	RS-AHR-8	559.08
	11 PC SET Sizes A to K	RS-AHR-11	839.08

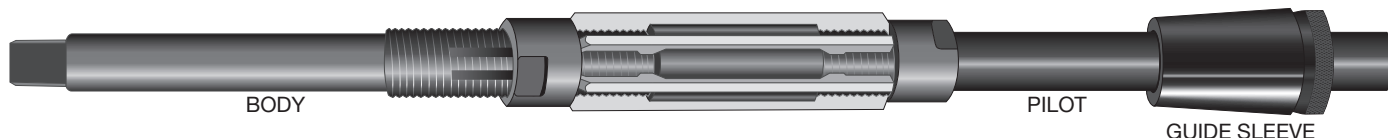
* Custom sets can be made per customer requirements. Inquire for pricing.

LONG PILOT ADJUSTABLE HAND REAMERS

ICS WIS

SPECIAL PURPOSE

RIGHT HAND CUT



High Speed Steel Long Pilot Adjustable Hand Reamers are designed for in line reaming when two holes are spaced far apart. The solid ground pilot uses a “floating” tapered guide sleeve which is seated in one hole to guide the reamer as it reams the other hole. The tapered guide sleeve can be used at either end of the other hole. They are also known Long Pilot Adjustable Blade Reamers, Adjustable In Line Reamers or Adjustable King Pin Reamers. Ends are center drilled so blades can be sharpened in place.

INDUSTRY SIZE	RANGE OF ADJUSTMENT		BLADE LENGTH	OVERALL LENGTH	NO. OF BLADES	ITEM NO.	PRICE
	FRACTIONAL	METRIC					
8A	1/4 to 9/32	6.30mm to 7.14mm	1-5/16	5-1/8	4	LPAHR016	106.26
7A	9/32 to 5/16	7.14mm to 7.93mm	1-3/8	5-1/2	4	LPAHR018	106.26
6A	5/16 to 11/32	7.93mm to 8.73mm	1-3/8	6-1/16	4	LPAHR020	106.26
5A	11/32 to 3/8	8.73mm to 9.52mm	1-3/8	6-1/4	4	LPAHR022	106.26
4A	3/8 to 13/32	9.52mm to 10.31mm	1-3/8	6-1/2	4	LPAHR024	106.26
3A	13/32 to 7/16	10.31mm to 11.11mm	1-7/16	6-9/16	6	LPAHR026	106.26
2A	7/16 to 15/32	11.11mm to 11.90mm	1-1/2	6-15/16	6	LPAHR028	106.26
A	15/32 to 17/32	11.90mm to 13.49mm	1-1/2	7-1/4	6	LPAHR030	106.56
B	17/32 to 19/32	13.49mm to 15.08mm	1-3/4	7-7/16	6	LPAHR034	108.86
C	19/32 to 21/32	15.08mm to 16.66mm	2	8-1/2	6	LPAHR038	110.38
D	21/32 to 23/32	16.66mm to 18.25mm	2-3/16	9-5/8	6	LPAHR042	111.92
E	23/32 to 25/32	18.25mm to 19.84mm	2-3/16	10	6	LPAHR046	114.16
F	25/32 to 27/32	19.84mm to 21.43mm	2-3/16	10	6	LPAHR050	116.22
G	27/32 to 15/16	21.43mm to 23.81mm	2-9/16	11-1/2	6	LPAHR054	120.20
H	15/16 to 1-1/16	23.81mm to 26.98mm	2-3/4	12-3/8	6	LPAHR060	129.16
I	1-1/16 to 1-3/16	26.98mm to 30.16mm	2-3/4	13-1/8	6	LPAHR104	157.66
J	1-3/16 to 1-11/32	30.16mm to 34.13mm	3-1/4	14-3/8	6	LPAHR112	178.26
K	1-11/32 to 1-1/2	34.13mm to 38.10mm	3-1/4	16	6	LPAHR122	219.76
L	1-1/2 to 1-13/16	38.10mm to 46.03mm	3-1/4	16-1/4	6	LPAHR132	332.90
M	1-13/16 to 2-7/32	46.03mm to 56.35mm	4	18	6	LPAHR152	448.92

LONG PILOT ADJUSTABLE HAND REAMER SETS

ICS WIS

PLASTIC CASE

RIGHT HAND CUT

ILLUSTRATION	DESCRIPTION	ITEM NO.	PRICE
	4 PC SET Sizes 8A to 5A	RS-LPAHR-4	480.34
	8 PC SET Sizes A to H	RS-LPAHR-8	983.28
	11 PC SET Sizes A to K	RS-LPAHR-11	1605.40

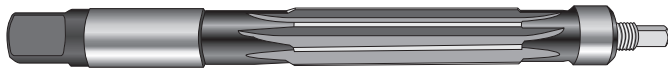
* Custom sets can be made per customer requirements. Inquire for pricing.

HIGH SPEED STEEL HAND EXPANSION REAMERS

ICS USA

GENERAL PURPOSE

RIGHT HAND CUT



STRAIGHT FLUTE
(General Purpose Reaming)



HELICAL FLUTE, LEFT HAND HELIX
(Reaming keyways & interrupted cut holes)

High Speed Steel Hand Expansion Reamers are designed to enlarge reamed holes by a few thousandths. The pilot and guide on these reamers are ground slightly undersize for clearance and to guide reamer. The flutes also have a ground starting taper to help guide reamer into hole. Reamer can be expanded slightly by turning adjusting screw on end of reamer.

SIZE	DEC. EQUIV.	FLUTE LENGTH	OVERALL LENGTH	FLUTE	
				STRAIGHT	HELICAL
				HERSF	HERHF
3/16	.1875	1-1/8	3-3/8	67.20	67.20
1/4	.2500	1-7/16	4-1/4	73.50	86.24
5/16	.3125	1-3/4	4-1/2	84.00	88.88
3/8	.3750	1-3/4	5	94.04	100.42
13/32	.4062	1-3/4	5	98.84	103.74
7/16	.4375	1-3/4	5	100.42	105.42
15/32	.4688	1-13/16	5-1/2	101.86	106.98
1/2	.5000	1-13/16	5-1/2	100.84	105.88
17/32	.5312	2-1/8	6	106.94	112.32
9/16	.5629	2-1/8	6	110.12	105.14
19/32	.5938	2-1/2	6	140.50	154.74
5/8	.6250	2-1/2	6-1/2	119.32	124.74
21/32	.6562	2-1/2	7	157.00	178.42
11/16	.6875	2-1/2	6-3/4	136.22	143.02
23/32	.7188	2-11/16	7	172.76	197.32
3/4	.7500	2-11/16	7-1/16	150.70	158.22
25/32	.7812	3-1/16	8	192.78	209.16
13/16	.8125	3-1/16	7-9/16	169.56	178.00
27/32	.8438	3-5/16	8	212.06	224.66

SIZE	DEC. EQUIV.	FLUTE LENGTH	OVERALL LENGTH	FLUTE	
				STRAIGHT	HELICAL
				HERSF	HERHF
7/8	.8750	3-5/16	8	182.58	191.70
29/32	.9062	3-9/16	9	238.14	269.52
15/16	.9375	3-9/16	8-3/8	208.66	219.08
31/32	.9688	3-3/4	9	266.00	280.98
1	1.0000	3-3/4	8-7/8	222.18	233.32
1-1/16	1.0625	4	9-3/16	231.84	243.44
1-1/8	1.1250	4-1/8	9-1/2	251.16	263.72
1-3/16	1.1875	4-1/4	9-7/8	256.00	268.80
1-1/4	1.2500	4-3/8	10-1/4	261.46	275.90
1-5/16	1.3125	4-1/2	10-5/8	275.32	289.10
1-3/8	1.3750	4-9/16	11	299.46	314.46
1-7/16	1.4375	4-3/4	11-3/8	328.44	344.86
1-1/2	1.5000	4-13/16	11-5/8	378.00	395.60
1-9/16	1.5625	4-13/16	11-7/8	397.04	416.90
1-5/8	1.6250	4-7/8	12	407.66	428.02
1-3/4	1.7500	5	12-3/8	469.48	492.96
1-7/8	1.8750	5	12-3/4	511.98	537.60
2	2.0000	5	13-1/16	598.92	628.88

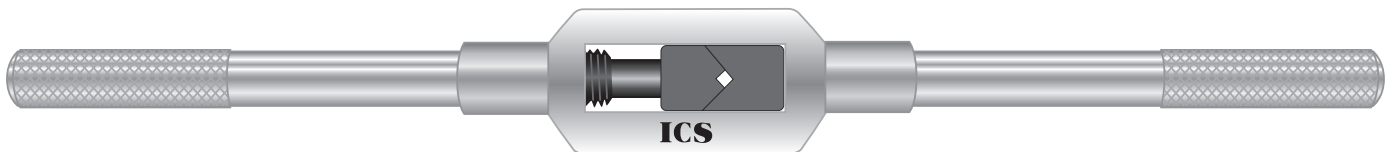
The maximum expansion on these reamers is as follows: .006 inch up to 7/16" sizes, .010 inch up to 15/16" sizes and .012 inch up to 1-1/2" sizes.

ADJUSTABLE TAP AND REAMER WRENCHES

ICS USA

GENERAL PURPOSE

STRAIGHT TYPE



Solid Die Cast Adjustable Tap and Reamer Wrenches are solidly built for a lifetime of industrial service under normal conditions. Size 0 to 7 wrenches have solid handles, one of which is forged integral with the body. The other handles turn for size adjustment. Size 7-1/2 to 8 wrenches have solid handles which are removable. One handle turns for size adjustment.

OVERALL LENGTH	CAPACITY						ITEM NO.	PRICE
	SCREW EXTRACTOR	HAND TAPS	MACHINE TAPS	PIPE TAPS	HAND REAMERS	ADJUSTABLE HAND REAMERS		
6-1/2	#1 - 3	1/16 - 1/4	0 - 14	-	1/8 - 21/64	8A - A	TW-0	9.18
9	#4	1/16 - 3/8	0 - 14	-	1/8 - 25/64	8A - C	TW-4	12.84
10	#5	5/32 - 1/2	7 - 14	1/8 - 1/4	11/64 - 7/16	8A - F	TW-5	15.52
13-1/2	#6	5/32 - 3/4	7 - 14	1/8 - 1/4	11/64 - 41/64	8A - G	TW-6	20.00
19	#7	1/4 - 1-1/8	-	1/8 - 3/4	9/32 - 29/32	3A - K	TW-7	35.18
31	#8	1/2 - 1-3/8	-	1/8 - 1	3/4 - 1-5/32	B - L	TW-7.5	96.44
40	#10	3/4 - 1-5/8	-	3/8 - 1-1/4	37/64 - 1-11/32	C - M	TW-8	147.00
54	#11 - 12	1 - 2-1/2	-	3/4 - 2	7/8 - 2-1/8	J - O	TW-9.5	177.94

HIGH SPEED STEEL METRIC HAND REAMERS

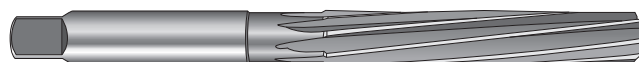
ICS WIS

GENERAL PURPOSE

RIGHT HAND CUT



STRAIGHT FLUTE
(General Purpose Reaming)



HELICAL FLUTE, LEFT HAND HELIX
(Reaming keyways & interrupted cut holes)

High Speed Steel Metric Hand Reamers are designed for extreme accuracy and are used by hand for final sizing of drilled holes. Both styles of hand reamers have a 45° bevel lead and a ground starting taper ranging from 1/2" to 1" on the cutting end for easy entry. They are not suitable for reaming blind holes if bottoming is required. Square end can be held in a vise or a tap wrench depending on whether the work or the reamer is rotating. Special Metric Hand Reamers with straight flutes and without the taper lead (suitable for full bottoming) may be made to order. Hand Reamers are also commonly known as Parallel Hand Reamers in Europe and Asia.

SIZE	DEC. EQUIV.	FLUTE LENGTH	OVERALL LENGTH	FLUTE	
				STRAIGHT	HELICAL
				HRSFM	HRHFM
1.50	.0591	25/32	1-5/8	-	-
2.00	.0787	13/16	2	-	-
2.50	.0984	1-1/8	2-1/4	-	-
3.00	.1181	1-7/32	2-7/16	45.88	45.88
3.20	.1260	1-1/4	2-1/2	45.88	45.88
3.50	.1378	1-3/8	2-3/4	45.88	45.88
4.00	.1575	1-1/2	3	45.88	45.88
4.50	.1772	1-5/8	3-1/4	45.88	45.88
5.00	.1969	1-3/4	3-1/2	48.52	48.52
5.50	.2165	1-13/16	3-5/8	48.52	48.52
6.00	.2362	1-13/16	3-5/8	48.52	48.52
6.50	.2559	2	3-15/16	-	-
7.00	.2756	2-1/8	4-1/4	51.98	51.98
7.50	.2953	2-1/8	4-3/16	-	-
8.00	.3150	2-1/4	4-1/2	60.76	60.76
8.50	.3346	2-1/4	4-1/2	-	-
9.00	.3543	2-7/16	4-7/8	60.76	60.76
9.50	.3740	2-7/16	4-7/8	-	-
10.00	.3937	2-5/8	5-1/4	65.94	65.94
10.50	.4134	2-5/8	5-1/4	-	-
11.00	.4331	2-13/16	5-5/8	65.94	65.94
11.50	.4528	2-13/16	5-5/8	-	-
12.00	.4724	3	6	72.98	72.98
12.50	.4724	3	6	-	-
13.00	.5118	3	6	80.60	80.60
13.50	.5118	3-1/16	6-7/16	-	-
14.00	.5512	3-1/16	6-7/16	80.60	80.60
14.50	.5709	3-1/16	6-7/16	-	-
15.00	.5906	3-1/16	6-7/16	92.36	92.36
15.50	.6102	3-7/16	6-7/8	-	-
16.00	.6299	3-7/16	6-7/8	101.12	101.12
16.50	.6495	3-7/16	6-7/8	-	-
17.00	.6693	3-7/16	6-7/8	101.12	101.12
17.50	.6890	3-11/16	7-7/16	-	-
18.00	.7087	3-11/16	7-7/16	107.32	107.32
18.50	.7283	3-11/16	7-7/16	-	-
19.00	.7480	3-11/16	7-7/16	123.54	123.54

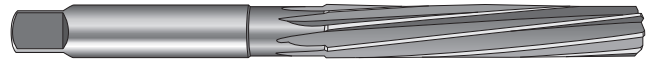
SIZE	DEC. EQUIV.	FLUTE LENGTH	OVERALL LENGTH	FLUTE	
				STRAIGHT	HELICAL
				HRSFM	HRHFM
19.50	.7677	3-15/16	7-15/16	-	-
20.00	.7874	3-15/16	7-15/16	123.54	123.54
20.50	.8071	3-15/16	7-15/16	-	-
21.00	.8268	3-15/16	7-15/16	-	-
21.50	.8465	4-3/16	8-1/2	-	-
22.00	.8661	4-3/16	8-1/2	-	-
22.50	.8858	4-3/16	8-1/2	-	-
23.00	.9055	4-3/16	8-1/2	-	-
23.50	.9252	4-3/16	8-1/2	-	-
24.00	.9449	4-1/2	9-1/16	-	-
24.50	.9646	4-1/2	9-1/16	-	-
25.00	.9842	4-1/2	9-1/16	-	-
26.00	1.0236	4-1/2	9-1/16	-	-
27.00	1.0630	4-7/8	9-3/4	-	-
28.00	1.1024	4-7/8	9-3/4	-	-
29.00	1.1417	4-7/8	9-3/4	CALL FOR PRICE	CALL FOR PRICE
30.00	1.1811	4-7/8	9-3/4	CALL FOR PRICE	CALL FOR PRICE
31.00	1.2205	5-1/4	10-7/16	CALL FOR PRICE	CALL FOR PRICE
32.00	1.2598	5-1/4	10-7/16	-	-
33.00	1.2992	5-1/4	10-7/16	-	-
34.00	1.3386	5-5/8	11-3/16	-	-
35.00	1.3780	5-5/8	11-3/16	-	-
36.00	1.4173	5-5/8	11-3/16	-	-
37.00	1.4567	5-5/8	11-3/16	-	-
38.00	1.4961	6	12	-	-
39.00	1.5354	6	12	-	-
40.00	1.5748	6	12	-	-
41.00	1.6142	6	12	-	-
42.00	1.6535	6	12	-	-
43.00	1.6929	6-7/16	12-13/16	-	-
44.00	1.7323	6-7/16	12-13/16	-	-
45.00	1.7716	6-7/16	12-13/16	-	-
46.00	1.8110	6-7/16	12-13/16	-	-
47.00	1.8504	6-7/8	13-11/16	-	-
48.00	1.8898	6-7/8	13-11/16	-	-
49.00	1.9291	6-7/8	13-11/16	-	-
50.00	1.9685	6-7/8	13-11/16	-	-

Please inquire for price and delivery for sizes listed without pricing.

HIGH SPEED STEEL HAND REAMERS

ICS WIS
GENERAL PURPOSE
RIGHT HAND CUT


STRAIGHT FLUTE
(General Purpose Reaming)



HELICAL FLUTE, LEFT HAND HELIX
(Reaming keyways & interrupted cut holes)

High Speed Steel Hand Reamers are designed for extreme accuracy and are used by hand for final sizing of drilled holes. Both styles of hand reamers have a 45° bevel lead and a ground starting taper ranging from 1/2" to 1" on the cutting end for easy entry. They are not suitable for reaming blind holes if bottoming is required. Square end can be held in a vise or a tap wrench depending on whether the work or the reamer is rotating. Special Hand Reamers with straight flutes and without the taper lead (suitable for full bottoming) may be made to order. Hand Reamers are also commonly known as Parallel Hand Reamers in Europe and Asia.

SIZE	DEC. EQUIV.	FLUTE LENGTH	OVERALL LENGTH	FLUTE	
				STRAIGHT	HELICAL
1/16	.0625	1	2	HRSF004	HRHF004
5/64	.0781	1	2	HRSF005	HRHF005
3/32	.0938	1-1/8	2-1/4	HRSF006	HRHF006
7/64	.1094	1-7/32	2-7/16	HRSF007	HRHF007
1/8	.1250	1-5/16	2-5/8	HRSF008	HRHF008
9/64	.1406	1-3/8	2-13/16	HRSF009	HRHF009
5/32	.1562	1-1/2	3	HRSF010	HRHF010
11/64	.1719	1-5/8	3-3/16	HRSF011	HRHF011
3/16	.1875	1-3/4	3-7/16	HRSF012	HRHF012
13/64	.2031	1-3/4	3-7/16	HRSF013	HRHF013
7/32	.2188	1-7/8	3-11/16	HRSF014	HRHF014
15/64	.2344	1-7/8	3-11/16	HRSF015	HRHF015
1/4	.2500	2	3-15/16	HRSF016	HRHF016
17/64	.2656	2-1/8	4-3/16	HRSF017	HRHF017
9/32	.2812	2-1/8	4-3/16	HRSF018	HRHF018
19/64	.2969	2-1/4	4-1/2	HRSF019	HRHF019
5/16	.3125	2-1/4	4-1/2	HRSF020	HRHF020
21/64	.3281	2-1/4	4-1/2	HRSF021	HRHF021
11/32	.3438	2-7/16	4-7/8	HRSF022	HRHF022
23/64	.3594	2-7/16	4-7/8	HRSF023	HRHF023
3/8	.3750	2-5/8	5-1/4	HRSF024	HRHF024
25/64	.3906	2-5/8	5-1/4	HRSF025	HRHF025
13/32	.4062	2-5/8	5-1/4	HRSF026	HRHF026
27/64	.4219	2-13/16	5-5/8	HRSF027	HRHF027
7/16	.4375	2-13/16	5-5/8	HRSF028	HRHF028
29/64	.4531	2-13/16	5-5/8	HRSF029	HRHF029
15/32	.4688	3	6	HRSF030	HRHF030
31/64	.4844	3	6	HRSF031	HRHF031
1/2	.5000	3	6	HRSF032	HRHF032
33/64	.5156	3	6	HRSF033	HRHF033
17/32	.5312	3-3/16	6-7/16	HRSF034	HRHF034
35/64	.5469	3-3/16	6-7/16	HRSF035	HRHF035
9/16	.5625	3-3/16	6-7/16	HRSF036	HRHF036
37/64	.5781	3-3/16	6-7/16	HRSF037	HRHF037
19/32	.5938	3-7/16	6-7/8	HRSF038	HRHF038
39/64	.6094	3-7/16	6-7/8	HRSF039	HRHF039
5/8	.6250	3-7/16	6-7/8	HRSF040	HRHF040
41/64	.6406	3-7/16	6-7/8	HRSF041	HRHF041
21/32	.6562	3-7/16	6-7/8	HRSF042	HRHF042
43/64	.6719	3-11/16	7-7/16	HRSF043	HRHF043
11/16	.6875	3-11/16	7-7/16	HRSF044	HRHF044
45/64	.7031	3-11/16	7-7/16	HRSF045	HRHF045
23/32	.7188	3-11/16	7-7/16	HRSF046	HRHF046

SIZE	DEC. EQUIV.	FLUTE LENGTH	OVERALL LENGTH	FLUTE	
				STRAIGHT	HELICAL
47/64	.7344	3-11/16	7-7/16	HRSF047	HRHF047
3/4	.7500	3-15/16	7-15/16	HRSF048	HRHF048
49/64	.7656	3-15/16	7-15/16	HRSF049	HRHF049
25/32	.7812	3-15/16	7-15/16	HRSF050	HRHF050
51/64	.7969	3-15/16	7-15/16	HRSF051	HRHF051
13/16	.8125	3-15/16	7-15/16	HRSF052	HRHF052
53/64	.8281	3-15/16	7-15/16	HRSF053	HRHF053
27/32	.8438	4-3/16	8-1/2	HRSF054	HRHF054
55/64	.8594	4-3/16	8-1/2	HRSF055	HRHF055
7/8	.8750	4-3/16	8-1/2	HRSF056	HRHF056
57/64	.8906	4-3/16	8-1/2	HRSF057	HRHF057
29/32	.9062	4-3/16	8-1/2	HRSF058	HRHF058
59/64	.9219	4-3/16	8-1/2	HRSF059	HRHF059
15/16	.9375	4-1/2	9-1/16	HRSF060	HRHF060
61/64	.9531	4-1/2	9-1/16	HRSF061	HRHF061
31/32	.9688	4-1/2	9-1/16	HRSF062	HRHF062
63/64	.9844	4-1/2	9-1/16	HRSF063	HRHF063
1	1.0000	4-1/2	9-1/16	HRSF100	HRHF100
1-1/32	1.0312	4-1/2	9-1/16	HRSF102	HRHF102
1-1/16	1.0625	4-7/8	9-3/4	HRSF104	HRHF104
1-3/32	1.0938	4-7/8	9-3/4	HRSF106	HRHF106
1-1/8	1.1250	4-7/8	9-3/4	HRSF108	HRHF108
1-5/32	1.1562	4-7/8	9-3/4	HRSF110	HRHF110
1-3/16	1.1875	5-1/4	10-7/16	HRSF112	HRHF112
1-7/32	1.2188	5-1/4	10-7/16	HRSF114	HRHF114
1-1/4	1.2500	5-1/4	10-7/16	HRSF116	HRHF116
1-9/32	1.2812	5-1/4	10-7/16	HRSF118	HRHF118
1-5/16	1.3125	5-1/4	10-7/16	HRSF120	HRHF120
1-11/32	1.3438	5-5/8	11-3/16	HRSF122	HRHF122
1-3/8	1.3750	6-5/16	12-5/8	HRSF124	HRHF124
1-13/32	1.4062	5-5/8	11-3/16	HRSF126	HRHF126
1-7/16	1.4375	5-5/8	11-3/16	HRSF128	HRHF128
1-15/32	1.4688	5-5/8	11-3/16	HRSF130	HRHF130
1-1/2	1.5000	6	12	HRSF132	HRHF132
1-9/16	1.5625	6	12	HRSF136	HRHF136
1-5/8	1.6250	6	12	HRSF140	HRHF140
1-11/16	1.6875	6-7/16	12-13/16	HRSF144	HRHF144
1-3/4	1.7500	6-7/16	12-13/16	HRSF14	HRHF14
1-13/16	1.8125	6-7/16	12-13/16	HRSF152	HRHF152
1-7/8	1.8750	6-7/8	13-11/16	HRSF156	HRHF156
1-15/16	1.9375	6-7/8	13-11/16	HRSF160	HRHF160
2	2.0000	6-7/8	13-11/16	HRSF200	HRHF200

TOLERANCES

1/16 - 1/4 dia.: +.0001 to +.0004"

1/4 - 1" dia.: +.0001 to +.0005"

1" - 3" dia.: +.0002 to +.0006"

HIGH SPEED STEEL TOWER BOLT REAMERS

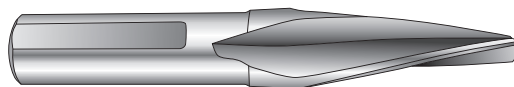
RT-37

ICS WIS

SPECIAL PURPOSE

RIGHT HAND CUT

STRAIGHT
SHANK




LEFT HAND
FLUTE

High Speed Steel Tower Bolt Reamers are designed for lining up bolt holes on cell phone towers, wind mills, and transmission towers. They have three flats on the shank for use in 1/2" three jaw power tools and pneumatic equipment. The extra short length makes them more useful in close quarters.

SIZE	SHANK DIAMETER	DIAMETER AT POINT	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
9/16	1/2	13/64	1-39/64	3-1/2	TBR036	44.88
11/16	1/2	3/8	2-33/64	4-21/64	TBR044	58.46
13/16	1/2	15/32	2-59/64	4-51/64	TBR052	78.26

TOWER BOLT REAMER SET

DESCRIPTION	TOWER BOLT REAMER SIZES	ITEM NO.	PRICE
<p>3 PIECE - HIGH SPEED STEEL</p> 	9/16, 11/16, 13/16	TBRS-3	181.90

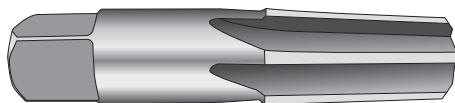
HIGH SPEED STEEL PIPE REAMERS

ICS WIS

SPECIAL PURPOSE

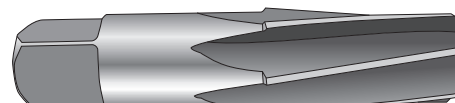
RIGHT HAND CUT

High Speed Steel Taper Pipe Reamers are manufactured with a taper of 3/4" per foot. They are used prior to tapping dry seal and ANPT threads when high quality threads are required.



STRAIGHT FLUTE

Straight Flute Pipe Reamers are designed for use in easy to ream materials.



SPIRAL FLUTE

Spiral Flute Pipe Reamers are designed for reaming harder materials where additional shear is needed.

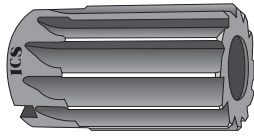
SIZE	SHANK DIA.	SMALL END	LARGE END	FLUTE LENGTH	OVERALL LENGTH	NO. OF FLUTES	SIZE OF SQUARE	STRAIGHT FLUTE		HELICAL FLUTE	
								ITEM NO.	PRICE	ITEM NO.	PRICE
1/16	.3125	.2320	.2910	3/4	2	6		PRSF004	18.60	PRSP004	22.44
1/8	.4375	.3160	.3620	3/4	2-1/8	6	.328	PRSF008	18.60	PRSP008	22.44
1/4	.5625	.4060	.4620	1-1/16	2-7/16	6	.421	PRSF016	30.68	PRSP016	27.36
3/8	.7000	.5400	.6060	1-1/16	2-9/16	8	.531	PRSF024	38.88	PRSP024	30.00
1/2	.6875	.6650	.7510	1-3/8	3-1/8	8	.515	PRSF032	43.24	PRSP032	47.50
3/4	.9063	.8760	.9620	1-3/8	3-1/4	10	.679	PRSF048	57.20	PRSP048	67.60
1	1.1250	1.1030	1.2120	1-3/4	3-3/4	10	.843	PRSF100	88.80	PRSP100	96.72
1-1/4	1.3125	1.4440	1.5530	1-3/4	4	10	.984	PRSF116	132.16	PRSP116	157.36
1-1/2	1.5000	1.6840	1.7930	1-3/4	4-1/4	10	1.125	PRSF132	195.08	PRSP132	191.60
2	1.8750	2.1590	2.2680	1-3/4	4-1/2	12	1.406	PRSF200	270.40	PRSP200	254.16
2-1/2	2.2050	2.5610	2.7720	2-5/8	5-1/2	12		PRSF232	485.60	PRSP232	540.00
3	2.6250	3.2020	3.3800	2-3/4	6	12		PRSF300	636.80	PRSP300	708.00

HIGH SPEED STEEL SHELL REAMERS

ICS **WIS**

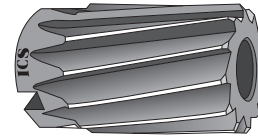
GENERAL PURPOSE

RIGHT HAND CUT



STRAIGHT FLUTE
SRSF

CALL FOR
PRICE



HELICAL FLUTE - LH 10° HELIX
SRHF

High Speed Steel Shell Reamers are designed to be used as a chucking reamer for reaming bearings and other similar work. They are fluted almost their whole length and have a tapered 1/8" per foot hole to be used with shell reamer arbors. One arbor fits several sizes of reamers so only 9 sizes of arbors are needed to fit all sizes of reamers.

SIZE	OVERALL LENGTH	HOLE DIA.	NO. OF FLUTES	FITS ARBOR NO.	FLUTE	
					STRAIGHT	HELICAL
3/4	2-1/4	3/8	10	4	SRSF048	SRHF048
13/16	2-1/2	1/2	10	5	SRSF052	SRHF052
7/8	2-1/2	1/2	10	5	SRSF056	SRHF056
15/16	2-1/2	1/2	10	5	SRSF060	SRHF060
1	2-1/2	1/2	10	5	SRSF100	SRHF100
1-1/16	2-3/4	5/8	10	6	SRSF104	SRHF104
1-1/8	2-3/4	5/8	10	6	SRSF108	SRHF108
1-3/16	2-3/4	5/8	10	6	SRSF112	SRHF112
1-1/4	2-3/4	5/8	12	6	SRSF116	SRHF116
1-5/16	3	3/4	12	7	SRSF120	SRHF120
1-3/8	3	3/4	12	7	SRSF124	SRHF124
1-7/16	3	3/4	12	7	SRSF128	SRHF128
1-1/2	3	3/4	12	7	SRSF132	SRHF132
1-9/16	3	3/4	12	7	SRSF136	SRHF136
1-5/8	3	3/4	12	7	SRSF140	SRHF140
1-11/16	3-1/2	1	12	8	SRSF144	SRHF144
1-3/4	3-1/2	1	12	8	SRSF148	SRHF148
1-13/16	3-1/2	1	12	8	SRSF152	SRHF152
1-7/8	3-1/2	1	12	8	SRSF156	SRHF156
1-15/16	3-1/2	1	12	8	SRSF160	SRHF160
2	3-1/2	1	14	8	SRSF200	SRHF200
2-1/16	3-3/4	1-1/4	14	9	SRSF204	SRHF204
2-1/8	3-3/4	1-1/4	14	9	SRSF208	SRHF208
2-3/16	3-3/4	1-1/4	14	9	SRSF212	SRHF212
2-1/4	3-3/4	1-1/4	14	9	SRSF216	SRHF216
2-5/16	3-3/4	1-1/4	14	9	SRSF220	SRHF220
2-3/8	3-3/4	1-1/4	14	9	SRSF224	SRHF224

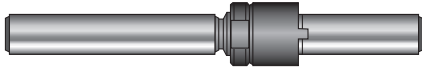
SIZE	OVERALL LENGTH	HOLE DIA.	NO. OF FLUTES	FITS ARBOR NO.	FLUTE	
					STRAIGHT	HELICAL
2-7/16	3-3/4	1-1/4	14	9	SRSF228	SRHF228
2-1/2	3-3/4	1-1/4	14	9	SRSF232	SRHF232
2-9/16	4	1-1/2	16	10	SRSF236	SRHF236
2-5/8	4	1-1/2	16	10	SRSF240	SRHF240
2-11/16	4	1-1/2	16	10	SRSF244	SRHF244
2-3/4	4	1-1/2	16	10	SRSF248	SRHF248
2-13/16	4	1-1/2	16	10	SRSF252	SRHF252
2-7/8	4	1-1/2	16	10	SRSF256	SRHF256
2-15/16	4	1-1/2	16	10	SRSF260	SRHF260
3	4	1-1/2	16	10	SRSF300	SRHF300
3-1/16	4-1/2	1-3/4	18	11	SRSF304	SRHF304
3-1/8	4-1/2	1-3/4	18	11	SRSF308	SRHF308
3-3/16	4-1/2	1-3/4	18	11	SRSF312	SRHF312
3-1/4	4-1/2	1-3/4	18	11	SRSF316	SRHF316
3-5/16	4-1/2	1-3/4	18	11	SRSF320	SRHF320
3-3/8	4-1/2	1-3/4	18	11	SRSF324	SRHF324
3-7/16	4-1/2	1-3/4	18	11	SRSF328	SRHF328
3-1/2	4-1/2	1-3/4	18	11	SRSF332	SRHF332
3-9/16	5	2	20	12	SRSF336	SRHF336
3-5/8	5	2	20	12	SRSF340	SRHF340
3-11/16	5	2	20	12	SRSF344	SRHF344
3-3/4	5	2	20	12	SRSF348	SRHF348
3-13/16	5	2	20	12	SRSF352	SRHF352
3-7/8	5	2	20	12	SRSF356	SRHF356
3-15/16	5	2	20	12	SRSF360	SRHF360
4	5	2	20	12	SRSF400	SRHF400
4-3/8	5	2	20	12	SRSF424	

SHELL REAMER ARBORS

ICS **WIS**

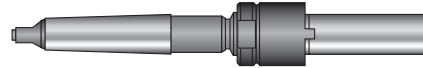
ADAPTERS

GROUND FINISH



STRAIGHT SHANK
SRASS

CALL FOR
PRICE



TAPER SHANK
SRATS

High Speed Steel Shell Reamer Arbors are tapered to fit the hole in the Shell Reamer. They fit together with slots in the reamer which engage lugs on the arbor for driving power.

SIZE	FITS REAMER SIZES	OVERALL LENGTH	ARBOR DIA.	WRENCH SIZE	STRAIGHT SHANK		TAPER SHANK		
					DIA.	ITEM NO.	TPR LNTH	MT#	ITEM NO.
4	21/32 - 25/32	9	3/8	19/32	1/2	SRASS#04	2-1/4	2	SRATS#04
5	13/16 - 1-1/32	9-1/2	1/2	25/32	5/8	SRASS#05	2-1/2	2	SRATS#05
6	1-1/16 - 1-9/32	10	5/8	7/8	3/4	SRASS#06	2-3/4	3	SRATS#06
7	1-5/16 - 1-21/32	11	3/4	1-1/16	7/8	SRASS#07	3	3	SRATS#07
8	1-11/16 - 2	12	1	1-7/16	1-1/8	SRASS#08	3-1/2	4	SRATS#08
9	2-1/16 - 2-1/2	13	1-1/4	1-13/16	1-3/8	SRASS#09	3-3/4	4	SRATS#09
10	2-9/16 - 3	14	1-1/2	2-3/16	1-5/8	SRASS#10	4	5	SRATS#10
11	3-1/16 - 3-1/2	15	1-3/4	2-9/16	2	SRASS#11	4-1/2	5	SRATS#11
12	3-9/16 - 4	16	2	3-1/8	2-1/8	SRASS#12	5	5	SRATS#12

AUTOMOTIVE STEERING AND SUSPENSION REAMERS

ICS WIS

SPECIAL PURPOSE

RIGHT HAND CUT

3 FLAT
1/2" SHANK



LEFT HAND
FLUTE

20° SPIRAL FLUTE

High Speed Steel Automotive Steering and Suspension Reamers are designed for rebuilding and repairing automotive suspension systems. They are used to deburr and enlarge tapered holes for tie rod ends, steering arms, and ball joint applications. They are also referred to as Automotive Taper Reamers or Ball Joint Taper Reamers.

SMALL END	LARGE END	FLUTE LENGTH	OVERALL LENGTH	SHANK DIAMETER	TAPER	ITEM NO.	PRICE
.4375 (7/16)	.8125 (13/16)	3	5-1/2	1/2	1-1/2"/ft. (7.15°)	ASSR028	60.38
.7500 (3/4)	1.3125 (1-5/16)	4-1/2	7	1/2	1-1/2"/ft. (7.15°)	ASSR048	154.84
.9375 (15/16)	1.5000 (1-1/2)	4-1/2	6-1/2	1/2	1-1/2"/ft. (7.15°)	ASSR060	162.60
.3750 (3/8)	1.1250 (1-1/8)	4-1/2	6-1/2	1/2	2"/ft. (9.56°)	ASSRA024	118.34
.4370 (11.1mm)	.8870 (22.8mm)	4-1/2	6-1/2	1/2	10:1 (5.71°)	ASSRM11.1	75.50

AUTOMOTIVE STEERING AND SUSPENSION REAMER SET

ICS WIS

PLASTIC CASE

RIGHT HAND CUT

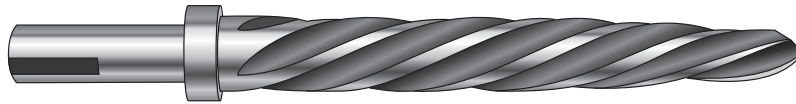
DESCRIPTION	SIZES IN SET	ITEM NO.	PRICE
<p>2 PC AUTOMOTIVE STEERING & SUSPENSION REAMER SET</p>	2 PIECE SET .4375, .7500 (7/16) (3/4)	RS-ASSR-2	237.34
	3 PIECE SET .4375, .7500, .9375 (7/16) (3/4) (15/16)	RS-ASSR-3	399.94
	4 PIECE SET .4375, .7500, .9375, .3750 (7/16) (3/4) (15/16) (3/8)	RS-ASSR-4	518.28
	5 PIECE SET .4375, .7500, .9375, .3750, .4370 (7/16) (3/4) (15/16) (3/8) (11.1mm)	RS-ASSR-5	593.78

HIGH SPEED STEEL CAR REAMERS - 1/2" ROUND SHANK

ICS WIS

HEAVY DUTY

RIGHT HAND CUT

3 FLAT
SHANKLEFT HAND
FLUTE

FAST SPIRAL

High Speed Steel Round Shank Car Reamers are designed for lining up holes in structural steel fabrication bridgework, ship construction, automotive maintenance, and railroad car manufacture. Short Length makes it useful in close quarters with any 1/2" 3 jaw power tool. They are also known as Construction Reamers or Aligning Reamers.

SIZE	DEC. EQUIV.	SHANK		FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
		DIAMETER	LENGTH				
5/16	.3125	1/2	1-1/2	2-3/4	4-5/8	CR-RS020	43.36
3/8	.3750	1/2	1-1/2	2-3/4	4-5/8	CR-RS024	43.36
7/16	.4375	1/2	1-1/2	3-1/2	5-3/8	CR-RS028	43.36
1/2	.5000	1/2	1-1/2	4	5-7/8	CR-RS032	48.70
9/16	.5625	1/2	1-1/2	4	5-7/8	CR-RS036	53.00
5/8	.6250	1/2	1-1/2	4-1/2	6-3/8	CR-RS040	58.80
-	.6520	1/2	1-1/2	4-1/2	6-3/8	*BBBR.6520	61.96
11/16	.6875	1/2	1-1/2	4-1/2	6-3/8	CR-RS044	65.86
3/4	.7500	1/2	1-1/2	5	6-7/8	CR-RS048	78.92
-	.7760	1/2	1-1/2	5	6-7/8	*BBBR.7760	80.56
13/16	.8125	1/2	1-1/2	5	6-7/8	CR-RS052	80.56
7/8	.8750	1/2	1-1/2	5	6-7/8	CR-RS056	85.26
15/16	.9375	1/2	1-1/2	5	6-7/8	CR-RS060	89.38
1	1.0000	1/2	1-1/2	5	6-7/8	CR-RS100	103.50
1-1/16	1.0625	1/2	1-1/2	5	6-7/8	CR-RS104	119.96
1-1/8	1.1250	1/2	1-1/2	5	6-7/8	CR-RS108	133.38
1-3/16	1.1875	1/2	1-1/2	5	6-7/8	CR-RS112	144.34
1-1/4	1.2500	1/2	1-1/2	5	6-7/8	CR-RS116	157.72
1-5/16	1.3125	1/2	1-1/2	5	6-7/8	CR-RS120	171.08
1-3/8	1.3750	1/2	1-1/2	5	6-7/8	CR-RS124	203.60
1-7/16	1.4375	1/2	1-1/2	5	6-7/8	CR-RS128	215.36
1-1/2	1.5000	1/2	1-1/2	5	6-7/8	CR-RS132	239.90

* Body Bound Bolt Reamer sizes

HIGH SPEED STEEL JOBBER REAMER SET - TAPER SHANK

ICS WIS

PLASTIC CASE

RIGHT HAND CUT

LONG
FLUTE45°
CHAMFER

High Speed Steel Taper Shank Jobber Reamers with Straight Flutes are designed for machine use in applications where long flutes are required. They have approximately the same flute length as hand reamers and are furnished with a 45° chamfer. For longer flutes and overall lengths, see our Machine Reamers on the following pages.

DESCRIPTION	SIZES IN SET	ITEM NO.	PRICE
10 PC TAPER SHANK JOBBER REAMER SET (not pictured)	Each set contains: 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	RS-TSJRSF-10	2649.96

HIGH SPEED STEEL BODY BOUND BOLT REAMERS

ICS WIS

HEAVY DUTY

RIGHT HAND CUT

3 FLAT SHANK



LEFT HAND FLUTE

FAST SPIRAL

Body Bound Bolt Reamers are designed to prevent the movement of a body bound bolt within the hole. They are manufactured to a tight tolerance slightly under the bolt size and used primarily for shoulder bolts on truck frames.

DECIMAL SIZE	SHANK		FLUTE	OVERALL	ITEM NO.	PRICE
	DIAMETER	LENGTH	LENGTH	LENGTH		
.6520	1/2	1-1/2	4-1/2	6-3/8	BBBR.6520	61.96
.7760	1/2	1-1/2	5	6-7/8	BBBR.7760	80.56

HIGH SPEED STEEL METRIC 1/2" ROUND SHANK CAR REAMERS

ICS WIS

HEAVY DUTY

RIGHT HAND CUT

3 FLAT SHANK



LEFT HAND FLUTE

FAST SPIRAL

High Speed Steel Metric 1/2" Round Shank Car Reamers are designed for lining up holes in structural steel fabrication, bridgework, ship construction, automotive maintenance, and railroad car manufacture. Short Length makes it useful in close quarters with any 1/2" 3 jaw power tool. They are also known as Construction Reamers or Aligning Reamers.

SIZE	DEC. EQUIV.	SHANK		FLUTE	OVERALL	ITEM NO.	PRICE
		DIAMETER	LENGTH	LENGTH	LENGTH		
12mm	.4724	1/2	1-1/2	102mm	152mm	CR-RSM12.0	43.36
14mm	.5512	1/2	1-1/2	102mm	152mm	CR-RSM14.0	53.00
16mm	.6299	1/2	1-1/2	125mm	178mm	CR-RSM16.0	58.80
18mm	.7087	1/2	1-1/2	125mm	178mm	CR-RSM18.0	65.86
19mm	.7480	1/2	1-1/2	132mm	184mm	CR-RSM19.0	78.92
20mm	.7874	1/2	1-1/2	132mm	184mm	CR-RSM20.0	80.56
22mm	.8661	1/2	1-1/2	132mm	184mm	CR-RSM22.0	80.56
24mm	.9449	1/2	1-1/2	132mm	184mm	CR-RSM24.0	89.38
25mm	.9843	1/2	1-1/2	132mm	184mm	CR-RSM25.0	103.50
26mm	1.0256	1/2	1-1/2	132mm	184mm	CR-RSM26.0	113.40
28mm	1.1024	1/2	1-1/2	132mm	184mm	CR-RSM28.0	119.96
30mm	1.1811	1/2	1-1/2	132mm	184mm	CR-RSM30.0	144.34
32mm	1.2598	1/2	1-1/2	132mm	184mm	CR-RSM32.0	157.72

HIGH SPEED STEEL METRIC HEX SHANK CAR REAMERS

ICS WIS

HEAVY DUTY

RIGHT HAND CUT

SAFETY STYLE HEX SHANK



LEFT HAND FLUTE

HELICAL FLUTE

Metric High Speed Steel Hex Shank Car Reamers are designed to be used in portable pneumatic equipment for structural steel erection. Their short overall length makes them useful in close quarters. Hex shank sizes are the same as the socket size for the bolt being used in the reamed hole. They are sometimes referred to as Erector Reamers. All ICS Safety Style Hex Shank Reamers are designed to protect against the danger and loss of falling objects such as a reamer. See OSHA 29CFR Part 1926.759 (falling object protection).

SIZE	DEC. EQUIV.	HEX SHANK	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
12mm	.4724	24mm	102mm	140mm	CR-HXM12.00	60.00
14mm	.5512	24mm	102mm	140mm	CR-HXM14.00	69.82
16mm	.6299	24mm	114mm	152mm	CR-HXM16.00	69.42
18mm	.7087	24mm	114mm	165mm	CR-HXM18.00	75.40
20mm	.7874	32mm	114mm	178mm	CR-HXM20.00	85.90
22mm	.8661	36mm	127mm	178mm	CR-HXM22.00	93.82
24mm	.9449	36mm	127mm	178mm	CR-HXM24.00	93.82
26mm	1.0256	41mm	127mm	178mm	CR-HXM26.00	113.40
28mm	1.1024	41mm	127mm	178mm	CR-HXM28.00	120.00
30mm	1.1811	46mm	127mm	178mm	CR-HXM30.00	170.62
32mm	1.2598	46mm	127mm	178mm	CR-HXM32.00	178.50
33mm	1.2992	46mm	127mm	200mm	CR-HXM33.00	204.30
36mm	1.4173	46mm	127mm	200mm	CR-HXM36.00	230.00
39mm	1.5354	50mm	127mm	200mm	CR-HXM39.00	241.50

HIGH SPEED STEEL CAR REAMERS - COMBINATION HEX/ROUND SHANK

ICS WIS
HEAVY DUTY
RIGHT HAND CUT
**1-1/4 HEX SHANK
ADAPTER**

FAST SPIRAL
**LEFT HAND
FLUTE**

High Speed Steel Combination Hex/Round Shank Car Reamers can be used with ANY 1/2" 3 jaw power tool or in portable pneumatic equipment. They are designed for lining up holes in structural steel fabrication, bridgework, ship construction, automotive maintenance, and railroad manufacturing. Short length makes it useful in close quarters. Safety Style 1-1/4" hex shank size requires only one size square drive impact wrench socket to use. All ICS Safety Style Hex Shank Reamers are designed to protect against the danger and loss of falling objects such as a reamer. See OSHA 29CFR Part 1926.759 (falling object protection).

SIZE	DEC. EQUIV.	SHANK		FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
		DIAMETER	LENGTH				
5/16	.3125	1/2	1-1/2	2-3/4	4-5/8	CR-HXC020	69.50
3/8	.3750	1/2	1-1/2	2-3/4	4-5/8	CR-HXC024	69.50
7/16	.4375	1/2	1-1/2	3-1/2	5-3/8	CR-HXC028	69.50
1/2	.5000	1/2	1-1/2	4	5-7/8	CR-HXC032	74.82
9/16	.5625	1/2	1-1/2	4	5-7/8	CR-HXC036	79.14
5/8	.6250	1/2	1-1/2	4-1/2	6-3/8	CR-HXC040	84.94
11/16	.6875	1/2	1-1/2	4-1/2	6-3/8	CR-HXC044	92.00
3/4	.7500	1/2	1-1/2	5	6-7/8	CR-HXC048	105.04
13/16	.8125	1/2	1-1/2	5	6-7/8	CR-HXC052	106.70
7/8	.8750	1/2	1-1/2	5	6-7/8	CR-HXC056	111.40
15/16	.9375	1/2	1-1/2	5	6-7/8	CR-HXC060	115.52
1	1.0000	1/2	1-1/2	5	6-7/8	CR-HXC100	129.64
1-1/16	1.0625	1/2	1-1/2	5	6-7/8	CR-HXC104	146.10
1-1/8	1.1250	1/2	1-1/2	5	6-7/8	CR-HXC108	159.50
1-3/16	1.1875	1/2	1-1/2	5	6-7/8	CR-HXC112	170.46
1-1/4	1.2500	1/2	1-1/2	5	6-7/8	CR-HXC116	183.84
1-5/16	1.3125	1/2	1-1/2	5	6-7/8	CR-HXC120	197.22
1-3/8	1.3750	1/2	1-1/2	5	6-7/8	CR-HXC124	215.36
1-7/16	1.4375	1/2	1-1/2	5	6-7/8	CR-HXC128	227.26
1-1/2	1.5000	1/2	1-1/2	5	6-7/8	CR-HXC132	251.66

HIGH SPEED STEEL CAR REAMERS - HEX SHANK

ICS WIS
HEAVY DUTY
RIGHT HAND CUT
**SAFETY STYLE
HEX SHANK**

HELICAL FLUTE
**LEFT HAND
FLUTE**

High Speed Steel Hex Shank Car Reamers are designed to be used in portable pneumatic equipment for structural steel erection. Their short overall length makes them useful in close quarters. Hex shank sizes are the same as the socket size for the bolt being used in the reamed hole. They are sometimes referred to as Erector Reamers. All ICS Safety Style Hex Shank Reamers are designed to protect against the danger and loss of falling objects such as a reamer. See OSHA 29CFR Part 1926.759 (falling object protection).

SIZE	DEC. EQUIV.	APPROX. POINT SIZE	HEX SHANK	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
9/16	.5625	9/32	1-1/16	5	5-1/2	CR-HX036	69.82
5/8	.6250	9/32	1-1/16	4-1/2	6	CR-HX040	69.82
11/16	.6875	3/8	1-1/16	4-1/2	6-3/8	CR-HX044	75.40
3/4	.7500	13/32	1-1/4	5	7	CR-HX048	85.90
13/16	.8125	15/32	1-1/4	5	7	CR-HX052	85.90
7/8	.8750	15/32	1-7/16	5	7	CR-HX056	93.82
15/16	.9375	19/32	1-7/16	5	7	CR-HX060	93.82
1	1.0000	5/8	1-7/16	5	7	CR-HX100	105.38
1-1/16	1.0625	13/16	1-5/8	5	7	CR-HX104	113.40
1-1/8	1.1250	55/64	1-5/8	5	7	CR-HX108	126.00
1-3/16	1.1875	59/64	1-13/16	5	7	CR-HX112	170.62
1-1/4	1.2500	15/16	1-13/16	5	7	CR-HX116	178.50
1-5/16	1.3125	1-1/16	2	5	7-7/8	CR-HX120	204.30
1-3/8	1.3750	1-1/8	2	5	7-7/8	CR-HX124	220.50
1-7/16	1.4375	1-1/8	2	5	7-7/8	CR-HX128	230.00
1-1/2	1.5000	1-1/4	2	5	7-7/8	CR-HX132	241.50
1-9/16	1.5625	1-5/16	2	5	7-7/8	CR-HX136	309.08

HIGH SPEED STEEL BRIDGE REAMERS - COMBINATION HEX/ROUND SHANK

ICS WIS

HEAVY DUTY

RIGHT HAND CUT

1-1/4 HEX SHANK ADAPTER



LEFT HAND FLUTE

SLOW SPIRAL

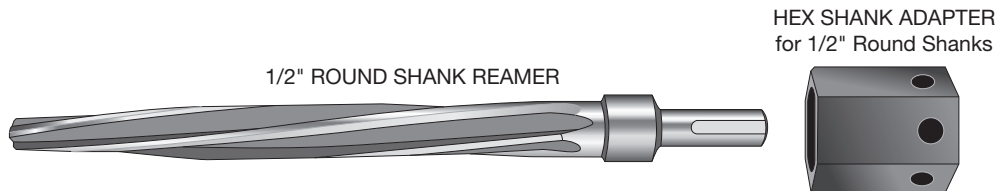
High Speed Steel Combination Hex/Round Shank Bridge Reamers can be used with ANY 1/2" 3 jaw power tool or in portable pneumatic equipment. They are designed for lining up holes in structural steel fabrication, bridgework, ship construction, automotive maintenance, and railroad manufacturing. Short length makes it useful in close quarters. Safety Style 1-1/4" hex shank size requires only one size square drive impact wrench socket to use. All ICS Safety Style Hex Shank Reamers are designed to protect against the danger and loss of falling objects such as a reamer. See OSHA 29CFR Part 1926.759 (falling object protection).

SIZE	DEC. EQUIV.	DIAMETER AT POINT	SHANK		FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
			DIAMETER	LENGTH				
7/16	.4375	17/64	1/2	1-1/2	4-3/8	7-1/8	BRHFHXC028	51.16
1/2	.5000	5/16	1/2	1-1/2	5-1/8	8	BRHFHXC032	53.40
9/16	.5625	3/8	1/2	1-1/2	5-1/8	8-5/8	BRHFHXC036	55.58
5/8	.6250	25/64	1/2	1-1/2	6-1/8	9-1/8	BRHFHXC040	64.04
11/16	.6875	13/32	1/2	1-1/2	7-1/8	9-1/8	BRHFHXC044	76.90
3/4	.7500	15/32	1/2	1-1/2	7-3/8	10	BRHFHXC048	84.02
13/16	.8125	35/64	1/2	1-1/2	7-3/8	10	BRHFHXC052	88.72
7/8	.8750	39/64	1/2	1-1/2	7-3/8	10	BRHFHXC056	100.28
15/16	.9375	43/64	1/2	1-1/2	7-3/8	10	BRHFHXC060	108.08
1	1.0000	47/64	1/2	1-1/2	7-3/8	10	BRHFHXC100	116.66
1-1/16	1.0625	13/16	1/2	1-1/2	7-3/8	10	BRHFHXC104	125.90
1-1/8	1.1250	55/64	1/2	1-1/2	7-3/8	10	BRHFHXC108	134.24
1-3/16	1.1875	59/64	1/2	1-1/2	7-3/8	10	BRHFHXC112	144.26
1-1/4	1.2500	63/64	1/2	1-1/2	7-3/8	11-1/2	BRHFHXC116	160.04
1-5/16	1.3125	1-1/16	1/2	1-1/2	7-3/8	11-1/2	BRHFHXC120	168.24
1-3/8	1.3750	1-1/8	1/2	1-1/2	7-3/8	11-1/2	BRHFHXC124	181.26
1-7/16	1.4375	1-3/16	1/2	1-1/2	7-3/8	11-1/2	BRHFHXC128	191.18
1-1/2	1.5000	1-1/4	1/2	1-1/2	7-3/8	11-1/2	BRHFHXC132	220.16
1-9/16	1.5625	1-1/4	1/2	1-1/2	7-3/8	11-1/2	BRHFHXC136	350.92
1-5/8	1.6250	1-1/4	1/2	1-1/2	7-3/8	11-1/2	BRHFHXC140	350.92
1-11/16	1.6875	1-3/8	1/2	1-1/2	7-3/8	11-1/2	BRHFHXC144	368.90
1-3/4	1.7500	1-3/8	1/2	1-1/2	7-3/8	11-1/2	BRHFHXC148	404.76
1-13/16	1.8125	1-7/16	1/2	1-1/2	7-3/8	11-1/2	BRHFHXC152	422.70
1-7/8	1.8750	1-1/2	1/2	1-1/2	7-3/8	11-1/2	BRHFHXC156	440.64
1-15/16	1.9375	1-1/2	1/2	1-1/2	7-3/8	11-1/2	BRHFHXC160	458.62
2	2.0000	1-3/4	1/2	1-1/2	7-3/8	11-1/2	BRHFHXC200	476.58

BRIDGE/CAR REAMER ADAPTER/SOCKET

The ICS Hex Shank Adapter eliminates the need to weld a nut to the back of your car or bridge reamer. The ICS Hex Shank Adapter converts all 1/2" Round Shanks to a standard 1-1/4" Hex Shank for use in pneumatic equipment.

ADAPTER ASSEMBLY LAYOUT



Three set screws included for non-slip chucking of car reamer

DESCRIPTION	ITEM NO.	PRICE
1-1/4" Hex Shank to 1/2" Round Shank Safety Adapter	HSA116	28.00

HIGH SPEED STEEL BRIDGE REAMERS - HEX SHANK

ICS WIS
HEAVY DUTY
RIGHT HAND CUT
**SAFETY STYLE
HEX SHANK**

**LEFT HAND
FLUTE**
HELICAL FLUTE

High Speed Steel Hex Shank Bridge Reamers are designed to be used in portable pneumatic equipment for structural steel erection. Their short overall length makes them useful in close quarters. Hex shank sizes are the same as the socket size for the bolt being used in the reamed hole. They are sometimes referred to as Erector Reamers. All ICS Safety Style Hex Shank Reamers are designed to protect against the danger and loss of falling objects such as a reamer. See OSHA 29CFR Part 1926.759 (falling object protection).

SIZE	DEC. EQUIV.	DIAMETER AT POINT	HEX SHANK	FLUTE LENGTH	OVERALL LENGTH	ITEM NO.	PRICE
7/16	.4375	17/64	1-1/16	4-3/8	5-7/8	BRHFHX028	51.16
1/2	.5000	5/16	1-1/16	5-1/8	6-5/8	BRHFHX032	53.40
9/16	.5625	3/8	1-1/16	5-1/8	6-5/8	BRHFHX036	55.58
5/8	.6250	25/64	1-1/16	6-1/8	7-5/8	BRHFHX040	64.04
11/16	.6875	13/32	1-1/16	7-1/8	8-5/8	BRHFHX044	76.90
3/4	.7500	15/32	1-1/4	7-3/8	8-7/8	BRHFHX048	84.02
13/16	.8125	35/64	1-1/4	7-3/8	8-7/8	BRHFHX052	88.72
7/8	.8750	39/64	1-7/16	7-3/8	8-7/8	BRHFHX056	100.28
15/16	.9375	43/64	1-7/16	7-3/8	8-7/8	BRHFHX060	108.08
1	1.0000	47/64	1-7/16	7-3/8	8-7/8	BRHFHX100	116.66
1-1/16	1.0625	13/16	1-5/8	7-3/8	8-7/8	BRHFHX104	131.26
1-1/8	1.1250	55/64	1-5/8	7-3/8	8-7/8	BRHFHX108	147.94
1-3/16	1.1875	59/64	1-13/16	7-3/8	8-7/8	BRHFHX112	165.38
1-1/4	1.2500	63/64	1-13/16	7-3/8	11-1/2	BRHFHX116	185.86
1-5/16	1.3125	1-1/16	2	7-3/8	11-1/2	BRHFHX120	190.78
1-3/8	1.3750	1-1/8	2	7-3/8	11-1/2	BRHFHX124	218.92
1-7/16	1.4375	1-3/16	2	7-3/8	11-1/2	BRHFHX128	227.60
1-1/2	1.5000	1-1/4	2	7-3/8	11-1/2	BRHFHX132	258.40
1-9/16	1.5625	1-1/4	2	7-3/8	11-1/2	BRHFHX136	350.92
1-5/8	1.6250	1-1/4	2	7-3/8	11-1/2	BRHFHX140	358.06
1-11/16	1.6875	1-3/8	2	7-3/8	11-1/2	BRHFHX144	368.90
1-3/4	1.7500	1-3/8	2	7-3/8	11-1/2	BRHFHX148	404.76
1-13/16	1.8125	1-7/16	2	7-3/8	11-1/2	BRHFHX152	422.70
1-7/8	1.8750	1-1/2	2	7-3/8	11-1/2	BRHFHX156	440.64
1-15/16	1.9375	1-1/2	2	7-3/8	11-1/2	BRHFHX160	458.62
2	2.0000	1-3/4	2	7-3/8	11-1/2	BRHFHX200	476.58

HIGH SPEED STEEL TAPER SHANK BRIDGE REAMERS

ICS WIS

HEAVY DUTY

RIGHT HAND CUT

LONG
BODY

LEFT HAND
FLUTE



STRAIGHT FLUTE



HELICAL FLUTE

High Speed Steel Taper Shank Bridge Reamers are designed for use in structural steel fabrication bridge work and ship construction to line up bolt and rivet holes. The front portion of the reamer is tapered at approximately 1" in 10 and the balance of the flute is parallel. They can be used in portable electric or pneumatic equipment. NOTE: Because of the heavy duty work involved, some sizes have larger Morse taper shanks than is usual for the diameter. These tools are also referred to as Boilermaker's Reamers, Rivet Hole Reamers, Aligning Reamers, or Construction Taper Reamers.

SIZE	DIA.		FLUTE LENGTH	OVERALL LENGTH	MORSE TAPER SHANK	FLUTE	
	DEC. EQUIV	AT POINT				STRAIGHT	HELICAL
						BRSF	BRHF
5/16	.3125	11/64	4-3/8	8-1/4	2	34.86	34.86
3/8	.3750	7/32	4-3/8	8-1/4	2	34.86	34.86
13/32	.4062	7/32	5-1/8	8-1/4	2	34.86	34.86
7/16	.4375	17/64	4-3/8	8-1/4	2	39.12	39.12
15/32	.4688	9/32	5-1/8	8-1/4	2	39.40	39.40
1/2	.5000	5/16	5-1/8	9	2	39.12	39.12
17/32	.5312	11/32	5-1/8	9	2	41.14	41.14
9/16	.5625	3/8	5-1/8	9	2	41.64	41.64
5/8	.6250	25/64	6-1/8	10	2	50.46	50.46
11/16	.6875	13/32	7-1/8	11-3/4	3	60.64	60.64
3/4	.7500	15/32	7-3/8	12	3	65.12	65.12
13/16	.8125	35/64	7-3/8	12	3	70.74	70.74
7/8	.8750	39/64	7-3/8	12	3	78.50	78.50
15/16	.9375	43/64	7-3/8	12	3	80.88	80.88
1	1.0000	47/64	7-3/8	12	3	89.70	89.70
1-1/16	1.0625	13/16	7-3/8	12	3	109.72	109.72

SIZE	DIA.		FLUTE LENGTH	OVERALL LENGTH	MORSE TAPER SHANK	FLUTE	
	DEC. EQUIV	AT POINT				STRAIGHT	HELICAL
						BRSF	BRHF
1-1/8	1.1250	55/64	7-3/8	12	3	109.96	109.96
1-3/16	1.1875	59/64	7-3/8	12	3	122.26	122.26
1-1/4	1.2500	63/64	7-3/8	13	4	135.96	135.96
1-5/16	1.3125	1-1/16	7-3/8	13	4	148.14	148.14
1-3/8	1.3750	1-1/8	7-3/8	13	4	154.00	154.00
1-7/16	1.4375	1-3/16	7-3/8	13	4	165.82	165.82
1-1/2	1.5000	1-1/4	7-3/8	13	4	187.34	187.34
1-9/16	1.5625	1-1/4	7-3/8	13	4	269.24	269.24
1-5/8	1.6250	1-1/4	7-3/8	13	4	269.24	269.24
1-11/16	1.6875	1-3/8	7-3/8	13	4	287.18	287.18
1-3/4	1.7500	1-3/8	7-3/8	13	4	323.08	323.08
1-13/16	1.8125	1-7/16	7-3/8	13	4	341.02	341.02
1-7/8	1.8750	1-1/2	7-3/8	13	4	358.98	358.98
1-15/16	1.9375	1-1/2	7-3/8	13	4	376.96	376.96
2	2.0000	1-3/4	7-3/8	13	4	394.90	394.90
2-1/16	2.0625	1-13/16	7-3/8	13	4	-	452.02

Larger sizes are available. Inquire for quote.

HIGH SPEED STEEL ROUND SHANK BRIDGE REAMERS

ICS WIS

HEAVY DUTY

RIGHT HAND CUT

STRAIGHT
SHANK

LEFT HAND
FLUTE



HELICAL FLUTE

High Speed Steel Round Shank Bridge Reamers are designed for lining up holes in structural steel fabrication bridgework, ship construction, automotive maintenance, and railroad car manufacture. The front portion of the reamer is tapered at approximately 1" in 10 and the balance of the flute is parallel. Can be used with any 1/2" 3 jaw power tool. Round Shank design helps prevent "whip" caused by tool snagging or binding.

SIZE	SHANK DIA.	DIA.		SHANK LENGTH	STRAIGHT SHANK
		AT POINT	FLUTE LENGTH		
7/16	1/2	17/64	4-3/8	1-1/2	45.14
1/2	1/2	5/16	5-1/8	1-1/2	49.74
9/16	1/2	3/8	5-1/8	1-1/2	51.94
5/8	1/2	25/64	6-1/8	1-1/2	58.72
11/16	1/2	13/32	7-1/8	1-1/2	69.08
3/4	1/2	15/32	7-3/8	1-1/2	73.66
13/16	1/2	35/64	7-3/8	1-1/2	77.66
7/8	1/2	39/64	7-3/8	1-1/2	80.54
15/16	1/2	43/64	7-3/8	1-1/2	82.78

SIZE	SHANK DIA.	DIA.		SHANK LENGTH	STRAIGHT SHANK
		AT POINT	FLUTE LENGTH		
1	1/2	47/64	7-3/8	1-1/2	91.10
1-1/16	1/2	13/16	7-3/8	1-1/2	112.00
1-1/8	*1/2	55/64	7-3/8	1-1/2	110.12
1-3/16	*1/2	59/64	7-3/8	1-1/2	121.68
1-1/4	*1/2	63/64	7-3/8	1-1/2	134.76
1-5/16	*1/2	1-1/16	7-3/8	1-1/2	152.78
1-3/8	*1/2	1-1/8	7-3/8	1-1/2	164.32
1-7/16	*1/2	1-3/16	7-3/8	1-1/2	175.90
1-1/2	*1/2	1-1/4	7-3/8	1-1/2	196.96

* Optional 3/4" Dia. Shank

Note: If work space is limited, consider using car reamers or tower bolt reamers to do the same job.

HIGH SPEED STEEL TAPER PIN DRILL/REAMERS

ICS **WIS**
SPECIAL PURPOSE
118° POINT
**DUAL
PURPOSE**

**TAPERED
FLUTES**

High Speed Steel Taper Pin Drill/Reamers are designed to drill and ream tapered holes in metal to fit taper pins in one operation. They are made with an included taper of 1 in 48 (1/4" per foot) and have chip breakers along the cutting edge.

SIZE	DIAMETER		FLUTE LENGTH	OVERALL LENGTH	FOR NO. SIZE	ITEM NO.	PRICE
	SMALL END	LARGE END					
3/32	.0664	.095	1-3/8	2-9/16	5/0	TPD/R006	54.48
7/64	.0772	.111	1-5/8	2-7/8	4/0	TPD/R007	54.48
1/8	.0879	.127	1-7/8	3-1/8	3/0	TPD/R008	55.22
9/64	.1013	.143	2	3-1/4	2/0	TPD/R009	70.04
5/32	.1137	.158	2-1/8	3-3/8	0	TPD/R010	63.20
11/64	.1245	.174	2-3/8	3-3/4	1	TPD/R011	79.60
3/16	.1325	.195	3	4-3/8	2	TPD/R012	79.68
7/32	.1575	.220	3	4-1/2	3	TPD/R014	102.86
1/4	.1775	.253	3-5/8	5-1/4	4	TPD/R016	82.26
9/32	.1983	.292	4-1/2	6-1/4	5	TPD/R018	129.04
5/16	.2223	.316	4-1/2	6-3/8	-	TPD/R020	129.04
11/32	.2455	.347	4-7/8	6-7/8	6	TPD/R022	187.48
3/8	.2664	.381	5-1/2	7-3/4	-	TPD/R024	187.48
13/32	.2818	.412	6-1/4	8-1/2	7	TPD/R026	207.36
7/16	.3128	.443	6-1/4	8-7/8	-	TPD/R028	207.36
1/2	.3600	.506	7	9-3/4	8	TPD/R032	219.92
5/8	.4638	.633	8-1/8	11-3/8	9	TPD/R040	414.72
3/4	.5647	.760	9-3/8	12-7/8	10	TPD/R048	467.10
7/8	.7060	.878	8-1/4	11-1/4	11	TPD/R056	663.40
1-1/32	.8420	1.050	10	13-5/8	12	TPD/R102	798.00
1-1/4	1.009	1.259	12	14	13	TPD/R116	840.00
1-1/2	1.250	1.342	14	18-1/4	14	TPD/R132	945.00

HIGH SPEED STEEL TAPER PIN REAMERS




RT-47

ICS WIS

SPECIAL PURPOSE

RIGHT HAND CUT

High Speed Steel Taper Pin Reamers are manufactured with a taper of 1/4" per foot. They are used to ream holes into which standard taper pins will fit. The point of each reamer will enter hole reamed by next smaller size. Hole to be reamed should be a few thousandths smaller than the small diameter of the finished reamed hole.

ITEM NO.	FLUTE STYLE	DESIGN USE	REAMING APPLICATION
TPRSF	 OXIDE FINISH	Hand	For use in easy to ream materials.
TPRSP	 BLACK/GOLD FINISH	Hand	For use in hard to ream materials and where the reamer tends to wedge itself.
TPRHF	 GOLD COBALT FINISH	Machine	For machine reaming of holes for taper pins on a production basis. Helical design throws the chips forward to alleviate packing of the flutes.

NOMINAL SIZE	PIN SIZE NO.	DIAMETER		FLUTE LENGTH	OVERALL LENGTH	NO. OF FLUTES	SHANK DIA.	SIZE OF SQUARE	FLUTE		
		SMALL END	LARGE END						STRAIGHT	SPIRAL	HELICAL
									TPRSF	TPRSP	TPRHF
5/64	7/0	.0497	.0666	13/16	1-13/16	4	5/64	.060	25.66	26.76	26.76
3/32	6/0	.0611	.0806	15/16	1-15/16	4	3/32	.070	25.66	26.76	26.76
7/64	5/0	.0719	.0966	1-3/16	2-3/16	4	7/64	.080	23.50	25.66	25.66
1/8	4/0	.0869	.1142	1-5/16	2-5/16	4	1/8	.095	23.50	25.66	25.66
9/64	3/0	.1029	.1302	1-5/16	2-5/16	4	9/64	.105	23.50	25.66	25.66
5/32	2/0	.1137	.1462	1-9/16	2-9/16	4	5/32	.115	21.00	22.42	22.42
11/64	0	.1287	.1638	1-11/16	2-15/16	6	11/64	.130	20.14	21.60	21.60
3/16	1	.1447	.1798	1-11/16	2-15/16	6	3/16	.140	19.66	21.82	21.82
13/64	2	.1605	.2008	1-15/16	3-3/16	6	13/64	.150	19.66	22.14	22.14
15/64	3	.1813	.2294	2-5/16	3-11/16	6	15/64	.175	19.66	22.14	22.14
17/64	4	.2071	.2604	2-9/16	4-1/16	6	17/64	.200	21.82	23.70	23.70
5/16	5	.2409	.2994	2-13/16	4-5/16	6	5/16	.235	23.50	25.52	25.52
23/64	6	.2773	.3540	3-11/16	5-7/16	6	23/64	.270	28.30	31.34	31.34
13/32	7	.3297	.4220	4-7/16	6-5/16	6	13/32	.305	36.38	39.40	39.40
7/16	8	.3971	.5050	5-3/16	7-3/16	6	7/16	.330	46.46	50.90	50.90
9/16	9	.4805	.6066	6-1/16	8-5/16	6	9/16	.420	56.52	61.54	61.54
5/8	10	.5799	.7216	6-13/16	9-5/16	6	5/8	.470	62.12	68.26	68.26
7/8	11	.7060	.8780	8-1/4	11-1/4	6	11/16	.503	120.76	149.10	149.10
1	12	.8420	1.0500	10	13-5/8	6	3/4	.569	147.00	198.22	198.22
1-1/4	13	1.0090	1.2590	12	16	6	1-1/16	.855	262.50	283.50	283.50
1-1/2	14	1.2500	1.5420	14	18-1/4	6	1-3/8	1.072	403.20	418.90	418.90

HIGH SPEED STEEL TAPER PIN REAMER SETS

ICS WIS

PLASTIC CASE

RIGHT HAND CUT

DESCRIPTION	SIZES IN SET	ITEM NO.	PRICE
11 PC TAPER PIN REAMER SETS	Straight Flute • 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10	RS-TPRSF-11	-
	Spiral Flute • 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10	RS-TPRSP-11	411.40
	Helical • 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10	RS-TPRHF-11	-



HIGH SPEED STEEL METRIC TAPER PIN REAMERS

ICS WIS

SPECIAL PURPOSE

RIGHT HAND CUT

High Speed Steel Metric Taper Pin Reamers are manufactured with a taper of 1 in 50. They are used to ream holes into which standard taper pins will fit. The point of each reamer will enter a hole reamed by next smaller size. Hole to be reamed should be a few thousandths smaller than the small diameter of the finished reamed hole.

ITEM NO.	FLUTE STYLE	DESIGN USE	REAMING APPLICATION
TPRSFM	 Straight (Right Hand) Flute	Hand or Machine	For hand or machine reaming tapered holes in easy to ream materials to receive 1:50 taper pins (DIN1 and DIN7178) (metric sizes)
TPRHFM	 Helical Slow Spiral (Left Hand) Flute	Hand or Machine	For hand or machine reaming tapered holes in hard to ream materials to receive 1:50 taper pins (DIN1 and DIN7178) (metric sizes)

SIZE	PIN SIZE NO.	PIN DIAMETER		FLUTE LENGTH	OVERALL LENGTH	SHANK DIAMETER	STRAIGHT FLUTE		HELICAL FLUTE	
		SMALL END	LARGE END				ITEM NO.	PRICE	ITEM NO.	PRICE
2.00	2.00	1.90	2.86	48.00	68.00	3.10	TPRSFM02.00	36.12	TPRHFM02.00	36.12
2.50	2.50	2.40	3.36	48.00	68.00	3.20	TPRSFM02.50	36.12	TPRHFM02.50	36.12
3.00	3.00	2.90	4.06	58.00	80.00	4.00	TPRSFM03.00	25.00	TPRHFM03.00	25.00
4.00	4.00	3.90	5.26	68.00	93.00	5.00	TPRSFM04.00	25.10	TPRHFM04.00	25.10
5.00	5.00	4.90	6.36	73.00	100.00	6.25	TPRSFM05.00	25.10	TPRHFM05.00	25.10
6.00	6.00	5.90	8.00	105.00	135.00	8.00	TPRSFM06.00	28.34	TPRHFM06.00	28.34
6.50	6.50	6.40	8.60	110.00	140.00	8.20	TPRSFM06.50	-	TPRHFM06.50	31.86
7.00	7.00	6.90	9.40	125.00	160.00	9.00	TPRSFM07.00	-	TPRHFM07.00	36.12
8.00	8.00	7.90	10.80	145.00	180.00	10.00	TPRSFM08.00	38.46	TPRHFM08.00	38.46
10.00	10.00	9.90	13.40	175.00	215.00	12.50	TPRSFM10.00	56.54	TPRHFM10.00	56.54
12.00	12.00	11.86	16.00	210.00	255.00	14.00	TPRSFM12.00	60.90	TPRHFM12.00	60.90
13.00	13.00	12.86	17.00	210.00	255.00	16.00	TPRSFM13.00	124.70	TPRHFM13.00	124.70
14.00	14.00	13.96	18.50	227.00	303.00	16.00	TPRSFM14.00	-	TPRHFM14.00	-
16.00	16.00	15.80	20.40	230.00	280.00	18.00	TPRSFM16.00	126.00	TPRHFM16.00	126.00
20.00	20.00	19.80	24.80	250.00	310.00	22.50	TPRSFM20.00	175.30	TPRHFM20.00	175.30
25.00	25.00	24.70	30.70	300.00	370.00	28.00	TPRSFM25.00	279.42	TPRHFM25.00	279.42
30.00	30.00	29.70	36.10	320.00	400.00	31.50	TPRSFM30.00	390.70	TPRHFM30.00	390.70
40.00	40.00	39.70	46.50	340.00	430.00	40.00	TPRSFM40.00	631.58	TPRHFM40.00	631.58
50.00	50.00	49.70	56.90	360.00	460.00	50.00	TPRSFM50.00	938.70	TPRHFM50.00	938.70

HIGH SPEED STEEL METRIC TAPER PIN DRILL/REAMERS

ICS WIS

SPECIAL PURPOSE

RIGHT HAND CUT

DUAL PURPOSE



TAPERED FLUTES

High Speed Steel Metric Taper Pin Drill/Reamers are designed to drill and ream tapered holes in metal to fit taper pins in one operation. They are made with an included taper of 1 in 50 and have chip breakers along the cutting edge.

SIZE	METRIC DIAMETER		METRIC FLUTE LENGTH	METRIC OVERALL LENGTH	FOR NO. SIZE	SHANK DIAMETER	ITEM NO.	PRICE
	SMALL END	LARGE END						
2.00	1.98	2.84	43.00	65.00	2.00	2.82	TPD/RM02.00	48.92
2.50	2.33	3.46	56.00	89.00	2.50	3.50	TPD/RM02.50	44.84
3.00	2.84	4.16	66.00	98.00	3.00	4.12	TPD/RM03.00	44.80
4.00	3.78	5.40	81.00	119.00	4.00	5.32	TPD/RM04.00	70.04
5.00	4.70	6.64	97.00	138.00	5.00	6.61	TPD/RM05.00	86.76
6.00	5.71	8.28	129.00	179.00	6.00	8.21	TPD/RM06.00	78.58
8.00	7.64	10.72	154.00	211.00	8.00	10.07	TPD/RM08.00	110.72
10.00	9.65	13.16	175.00	246.00	10.00	13.10	TPD/RM10.00	141.80
12.00	11.96	15.70	198.00	275.00	12.00	15.65	TPD/RM12.00	220.02
13.00	12.61	16.74	206.00	303.00	13.00	16.71	TPD/RM13.00	266.48
14.00	13.80	18.00	210.00	310.00	14.00	18.00	TPD/RM14.00	283.50
16.00	15.80	20.40	230.00	335.00	16.00	21.00	TPD/RM16.00	415.00

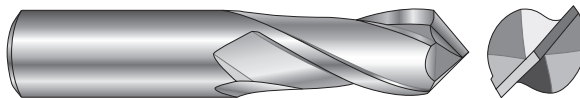
SOLID CARBIDE 60° & 90° DRILL MILLS

ICS USA

HEAVY DUTY

RIGHT HAND CUT

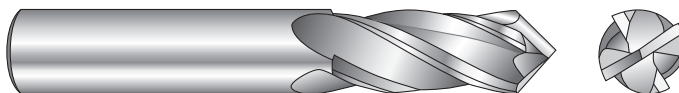
2 FLUTE - SINGLE END



Solid Carbide Drill Mills are designed to be a 5 in 1 multi-purpose tool for drilling, chamfering, spotting, side milling, and countersinking.

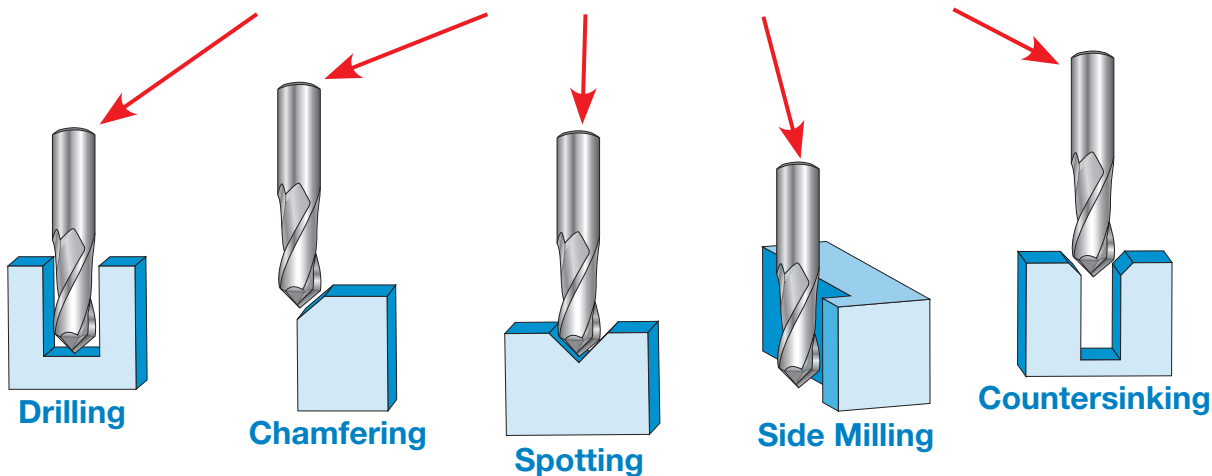
SIZE	SHANK DIAMETER	FLUTE LENGTH	OVERALL LENGTH	2 FLUTE - 60° POINT ANGLE		2 FLUTE - 90° POINT ANGLE	
				ITEM NO.	PRICE	ITEM NO.	PRICE
1/8	1/8	1/2	1-1/2	SCDM260-008	17.02	SCDM290-008	17.02
3/16	3/16	5/8	2	SCDM260-012	22.68	SCDM290-012	22.68
1/4	1/4	3/4	2-1/2	SCDM260-016	30.46	SCDM290-016	30.46
5/16	5/16	13/16	2-1/2	SCDM260-020	41.16	SCDM290-020	41.16
3/8	3/8	1	2-1/2	SCDM260-024	42.64	SCDM290-024	42.64
7/16	7/16	1	2-3/4	SCDM260-028	43.44	SCDM290-028	43.44
1/2	1/2	1	3	SCDM260-032	79.60	SCDM290-032	79.60
5/8	5/8	1-1/4	3-1/2	SCDM260-040	133.78	SCDM290-040	133.78
3/4	3/4	1-1/2	4	SCDM260-048	220.92	SCDM290-048	220.92

4 FLUTE - SINGLE END



SIZE	SHANK DIAMETER	FLUTE LENGTH	OVERALL LENGTH	4 FLUTE - 60° POINT ANGLE		4 FLUTE - 90° POINT ANGLE	
				ITEM NO.	PRICE	ITEM NO.	PRICE
1/8	1/8	1/2	1-1/2	SCDM460-008	17.02	SCDM490-008	17.02
3/16	3/16	5/8	2	SCDM460-012	22.68	SCDM490-012	22.68
1/4	1/4	3/4	2-1/2	SCDM460-016	30.46	SCDM490-016	30.46
5/16	5/16	13/16	2-1/2	SCDM460-020	41.16	SCDM490-020	41.16
3/8	3/8	1	2-1/2	SCDM460-024	42.64	SCDM490-024	42.64
7/16	7/16	1	2-3/4	SCDM460-028	43.44	SCDM490-028	43.44
1/2	1/2	1	3	SCDM460-032	79.60	SCDM490-032	79.60
5/8	5/8	1-1/4	3-1/2	SCDM460-040	133.78	SCDM490-040	133.78
3/4	3/4	1-1/2	4	SCDM460-048	220.92	SCDM490-048	220.92

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