



2014 CATALOG

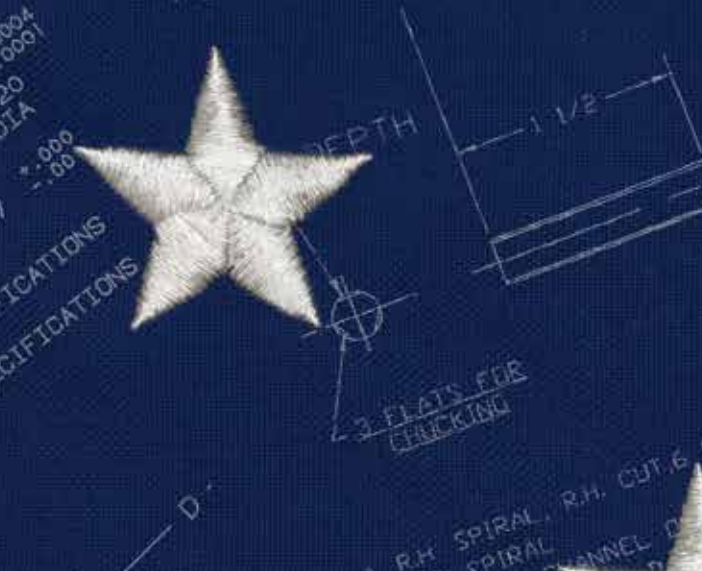
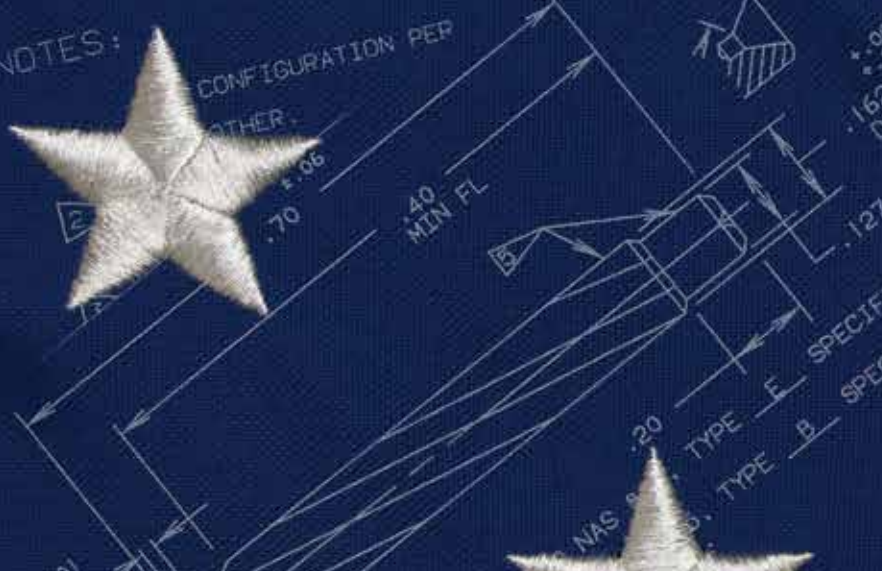
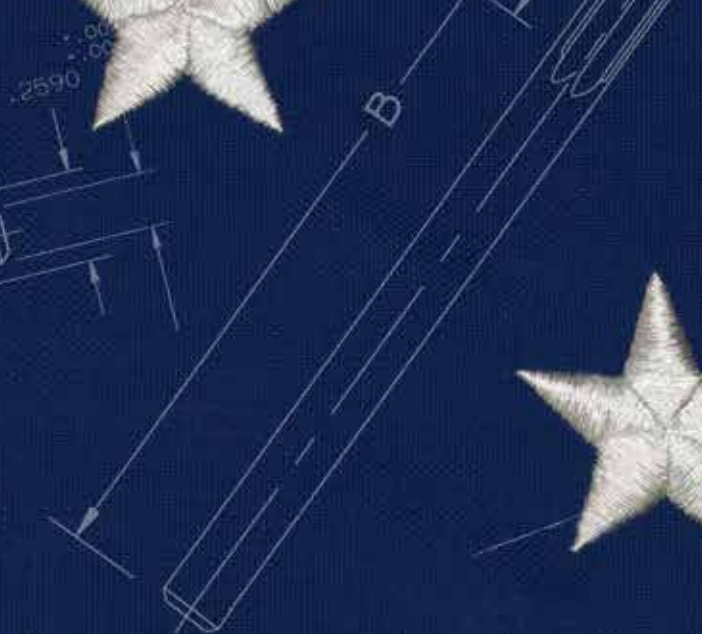
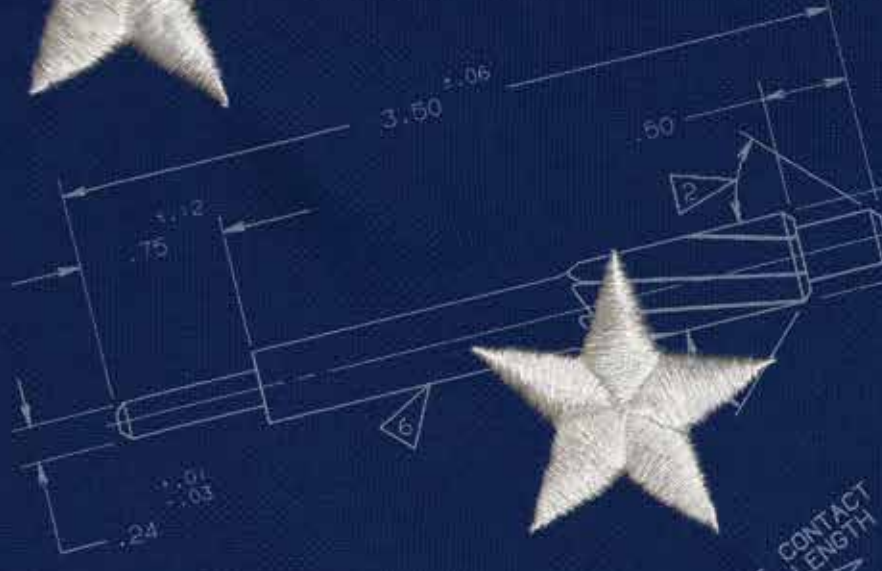
YANKEE

CORPORATION

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MADE IN THE USA



NOTES:

CONFIGURATION PER
OTHER.

1. REAMER SECTION TO BE MANUFACTURED
UNLESS NOTED.
2. REAMER ADAPTOR TO BE MANUFACTURED
AS NOTED AND MEET TORQUE RE-
QUIREMENTS.
3. TYPE A SPECIFICATIONS
4. TYPE B SPECIFICATIONS

5. TYPE C SPECIFICATIONS
6. TYPE D SPECIFICATIONS
7. TYPE E SPECIFICATIONS
8. TYPE F SPECIFICATIONS
9. TYPE G SPECIFICATIONS
10. TYPE H SPECIFICATIONS
11. TYPE I SPECIFICATIONS
12. TYPE J SPECIFICATIONS
13. TYPE K SPECIFICATIONS
14. TYPE L SPECIFICATIONS
15. TYPE M SPECIFICATIONS
16. TYPE N SPECIFICATIONS
17. TYPE O SPECIFICATIONS
18. TYPE P SPECIFICATIONS
19. TYPE Q SPECIFICATIONS
20. TYPE R SPECIFICATIONS
21. TYPE S SPECIFICATIONS
22. TYPE T SPECIFICATIONS
23. TYPE U SPECIFICATIONS
24. TYPE V SPECIFICATIONS
25. TYPE W SPECIFICATIONS
26. TYPE X SPECIFICATIONS
27. TYPE Y SPECIFICATIONS
28. TYPE Z SPECIFICATIONS

NAS 897

- 1. R.H. SPIRAL, R.H. CUT, 6 FL
- 2. 25° SPIRAL
- 3. COOLANT CHANNEL
- 4. ALL DIA'S TO BE HONED
- 5. HEAT TREAT





Warranty

Yankee warrants to original equipment manufacturers, distributors and industrial and commercial users of its products that each new product which it manufactures or supplies is free from defects in material and craftsmanship. Yankee's sole obligation under this warranty is limited to furnishing, without additional charge, a replacement for, or at its option, repairing or issuing credit for such product which shall, within 30 days from date of sale by Yankee, be returned freight prepaid to the plant and which, upon inspection, is determined by Yankee to be defective in materials or workmanship. The provisions of this warranty shall not apply to any product which has been subjected to misuse, improper operating conditions, machine setup or which has been repaired or altered, other than at Yankee.

Returned Goods

Returned goods, for any reason, will only be accepted with prior authorization given by Yankee. A Returned Goods Authorization (RGA) number assigned by Yankee must be clearly marked on the shipment in order to obtain credit. Orders returned due to customer error are subject to a 15% restocking charge. Credit will not be given on altered tools. Claims for shipping discrepancies or non-receipt must be made within 30 days.

Terms of Payment

1% Ten Days, Net Thirty Days. Invoices past due are subject to a 11/2% service charge per month (18% APR). Accounts past 45 days will be subject to placement on HOLD. Accounts repeatedly over terms will be subject to account termination.

Minimum Order

Orders must have a minimum of \$25 Net.

Shipping

Transportation pre-paid on orders of \$500 Net or more. FOB Fairfax, Vermont.

Specialty Tools

Industry practice assumes a 10% over/under policy on the shipment of specialty tools. Quotations and purchase orders must be clearly marked if over/under shipments are not allowed. Cancellation of specialty tools are subject to material and workmanship charges prior to cancellation.

Catalog Pricing

All pricing found within this catalog is available on CD-ROM. Our pricing CD contains an ASCII text format (comma delimited), which can then be imported into most database and spreadsheet programs. Also included is .pdf and .xls versions of our pricing.

Please call or fax us today for your copy.

Safety

Even though all products manufactured by The Yankee Corporation are designed for safe operation under normal use, cutting tools may break and/or shatter. We stress the importance of safety in your tool usage.

1. **Always** use safety glasses/goggles when performing any reaming operation.
2. **Never** exceed recommended speeds or feeds for your application.

Diameter Tolerances	
Chucking, Production and Hand Reamers:	
Up to .5000	+ .0002
.	+ .0000
.5001 up to .6250	+ .0003
.	+ .0000
.6251 up to 1.5000	+ .0001
.	+ .0004
1.5001 and up	+ .0002
.	+ .0006
Dowel Pin Reamers:	
All Sizes	- .0002
Taper Reamers:	
All Sizes	+ .0005
Valve Guide Reamers:	
All Sizes	+ .0005
Counterbores:	
All Sizes	+ .0005











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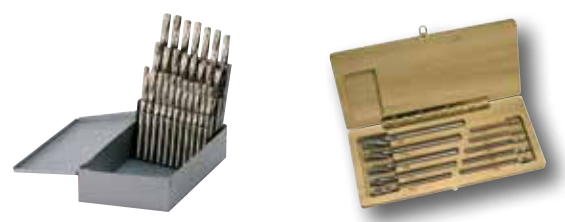
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 485

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6 Chucking Reamers | Straight Shank

HIGH SPEED STEEL



433

Straight
Flute

435

Right Hand
Spiral

435L

Left Hand
Spiral

For a complete listing of
stocked decimal sizes,
please refer to pages 12-13.

Decimal	Wire	Letter	Fraction	Over/ Under	Metric	Flute Length	# of Flutes	Overall Length	Shank Diameter	433 List Price	435/435L List Price
0.0135	#80					3/8	2	3/4	.0135	21.24	
0.0145	#79					3/8	2	3/4	.0145	21.24	
0.0156			1/64			3/8	2	3/4	.0156	21.24	
0.0160	#78					3/8	2	7/8	.0160	21.24	
0.0180	#77					3/8	2	7/8	.0180	21.24	
0.0200	#76					3/8	2	7/8	.0200	21.24	
0.0210	#75					1/2	3	1	.0210	21.24	
0.0225	#74					1/2	3	1	.0225	21.24	
0.0240	#73					1/2	3	1-1/8	.0240	21.24	
0.0250	#72					1/2	3	1-1/8	.0250	21.24	
0.0260	#71					1/2	3	1-1/4	.0260	21.24	
0.0280	#70					1/2	3	1-1/4	.0280	21.24	
0.0292	#69					1/2	3	1-3/8	.0292	21.24	
0.0310	#68					1/2	3	1-3/8	.0310	21.24	
0.0312			1/32			1/2	3	1-3/8	.0312	16.79	
0.0320	#67					1/2	3	1-3/8	.0320	17.79	
0.0330	#66					1/2	3	1-3/8	.0330	17.79	
0.0350	#65					1/2	3	1-1/2	.0350	17.79	
0.0360	#64					1/2	3	1-1/2	.0360	17.79	
0.0370	#63					1/2	3	1-1/2	.0370	17.79	
0.0380	#62					1/2	3	1-1/2	.0380	17.79	
0.0390	#61					1/2	3	1-1/2	.0390	17.79	
0.0394					1.0mm	1/2	4	2-1/2	.0394	17.79	20.47
0.0400	#60					1/2	4	2-1/2	.0390	17.79	20.47
0.0410	#59					1/2	4	2-1/2	.0390	17.79	20.47
0.0420	#58					1/2	4	2-1/2	.0390	17.79	20.47
0.0430	#57					1/2	4	2-1/2	.0390	17.79	20.47
0.0465	#56					1/2	4	2-1/2	.0455	17.79	20.47
0.0469			3/64			1/2	4	2-1/2	.0455	17.79	20.47
0.0520	#55						4	2-1/2	.0510	17.79	20.47
0.0550	#54					1/2	4	2-1/2	.0510	17.79	20.47
0.0591					1.5mm	1/2	4	2-1/2	.0510	17.79	20.47
0.0595	#53					1/2	4	2-1/2	.0585	17.79	20.47
0.0625			1/16			1/2	4	2-1/2	.0585	16.02	20.47
0.0635	#52					1/2	4	2-1/2	.0585	16.02	20.47
0.0670	#51					3/4	4	3	.0660	14.32	16.49
0.0700	#50					3/4	4	3	.0660	14.32	16.49
0.0730	#49					3/4	4	3	.0660	14.32	16.49
0.0760	#48					3/4	4	3	.0720	14.32	16.49
0.0781			5/64			3/4	4	3	.0720	14.32	16.49
0.0785	#47					3/4	4	3	.0720	14.32	16.49
0.0787					2.0mm	3/4	4	3	.0720	14.32	16.49
0.0810	#46					3/4	4	3	.0771	14.32	16.49
0.0820	#45					3/4	4	3	.0771	14.32	16.49
0.0860	#44					3/4	4	3	.0810	14.32	16.49
0.0890	#43					3/4	4	3	.0810	14.32	16.49
0.0935	#42					3/4	4	3	.0880	14.32	16.49
0.0938			3/32			3/4	4	3	.0880	12.90	16.34
0.0960	#41					7/8	4	3-1/2	.0928	14.49	16.62
0.0980	#40					7/8	4	3-1/2	.0928	14.49	16.62
0.0984					2.5mm	7/8	4	3-1/2	.0928	14.49	16.62
0.0995	#39					7/8	4	3-1/2	.0928	14.49	16.62
0.1015	#38					7/8	4	3-1/2	.0950	14.49	16.62
0.1040	#37					7/8	4	3-1/2	.0950	14.49	16.62
0.1065	#36					7/8	4	3-1/2	.1030	14.49	16.62
0.1094			7/64			7/8	4	3-1/2	.1030	14.92	17.10
0.1100	#35					7/8	4	3-1/2	.1030	14.92	17.10
0.1110	#34					7/8	4	3-1/2	.1055	14.92	17.10
0.1130	#33					7/8	4	3-1/2	.1055	14.92	17.10
0.1160	#32					7/8	4	3-1/2	.1120	14.92	17.10
0.1181					3.0mm	7/8	4	3-1/2	.1120	14.92	17.10
0.1200	#31					7/8	4	3-1/2	.1120	14.92	17.10
0.1240					o/u	7/8	4	3-1/2	.1190	14.92	17.10
0.1250			1/8			7/8	4	3-1/2	.1190	11.91	15.42
0.1260					o/u	7/8	4	3-1/2	.1190	14.92	17.10
0.1285	#30					7/8	4	3-1/2	.1190	14.92	17.10
0.1360	#29					1	4	4	.1275	17.79	20.47
0.1378					3.5mm	1	4	4	.1350	17.79	20.47

Decimal	Wire Letter	Fraction	Over/Under	Metric	Flute Length	# of Flutes	Overall Length	Shank Diameter	433 List Price	435/435L List Price
0.1405	#28				1	4	4	.1350	17.79	20.47
0.1406		9/64			1	4	4	.1350	17.79	20.47
0.1440	#27				1	4	4	.1350	17.79	20.47
0.1470	#26				1	4	4	.1430	17.79	20.47
0.1495	#25				1	4	4	.1430	17.79	20.47
0.1520	#24				1	4	4	.1460	17.79	20.47
0.1540	#23				1	4	4	.1460	17.79	20.47
0.1562		5/32			1	4	4	.1510	17.79	20.47
0.1570	#22				1	6	4	.1510	17.79	20.47
0.1575				4.0mm	1	6	4	.1510	17.79	20.47
0.1590	#21				1-1/8	6	4-1/2	.1530	19.01	21.85
0.1610	#20				1-1/8	6	4-1/2	.1530	19.01	21.85
0.1660	#19				1-1/8	6	4-1/2	.1595	19.01	21.85
0.1695	#18				1-1/8	6	4-1/2	.1595	19.01	21.85
0.1719		11/64			1-1/8	6	4-1/2	.1645	19.01	21.85
0.1730	#17				1-1/8	6	4-1/2	.1645	19.01	21.85
0.1770	#16				1-1/8	6	4-1/2	.1704	19.01	21.85
0.1772				4.5mm	1-1/8	6	4-1/2	.1704	19.01	21.85
0.1800	#15				1-1/8	6	4-1/2	.1755	19.01	21.85
0.1820	#14				1-1/8	6	4-1/2	.1755	19.01	21.85
0.1850	#13				1-1/8	6	4-1/2	.1805	19.01	21.85
0.1865				o/u	1-1/8	6	4-1/2	.1805	19.01	21.85
0.1875		3/16			1-1/8	6	4-1/2	.1805	17.10	20.76
0.1885				o/u	1-1/8	6	4-1/2	.1805	19.01	21.85
0.1890	#12				1-1/8	6	4-1/2	.1805	19.01	21.85
0.1910	#11				1-1/4	6	5	.1860	21.31	24.48
0.1935	#10				1-1/4	6	5	.1860	21.31	24.48
0.1960	#9				1-1/4	6	5	.1895	21.31	24.48
0.1969				5.0mm	1-1/4	6	5	.1895	21.31	24.48
0.1990	#8				1-1/4	6	5	.1895	21.31	24.48
0.2010	#7				1-1/4	6	5	.1945	21.31	24.48
0.2031		13/64			1-1/4	6	5	.1945	21.31	24.48
0.2040	#6				1-1/4	6	5	.1945	21.31	24.48
0.2055	#5				1-1/4	6	5	.2016	21.31	24.48
0.2090	#4				1-1/4	6	5	.2016	21.31	24.48
0.2130	#3				1-1/4	6	5	.2075	21.31	24.48
0.2165				5.5mm	1-1/4	6	5	.2075	21.31	24.48
0.2188		7/32			1-1/4	6	5	.2075	21.31	24.48
0.2210	#2				1-1/2	6	6	.2173	21.87	25.16
0.2280	#1				1-1/2	6	6	.2173	21.87	25.16
0.2340		A			1-1/2	6	6	.2265	21.87	25.16
0.2344		15/64			1-1/2	6	6	.2265	21.87	25.16
0.2362				6.0mm	1-1/2	6	6	.2265	23.06	25.34
0.2380	B				1-1/2	6	6	.2329	23.06	25.34
0.2420	C				1-1/2	6	6	.2329	23.06	25.34
0.2460	D				1-1/2	6	6	.2329	23.06	25.34
0.2490				o/u	1-1/2	6	6	.2405	20.76	27.05
0.2500	E	1/4			1-1/2	6	6	.2405	19.58	21.56
0.2510				o/u	1-1/2	6	6	.2405	20.76	27.05
0.2559				6.5mm	1-1/2	6	6	.2405	23.06	25.34
0.2570	F				1-1/2	6	6	.2485	23.06	25.34
0.2610	G				1-1/2	6	6	.2485	23.06	25.34
0.2656		17/64			1-1/2	6	6	.2485	25.69	28.28
0.2660	H				1-1/2	6	6	.2485	25.69	28.28
0.2720	I				1-1/2	6	6	.2485	25.69	28.28
0.2756				7.0mm	1-1/2	6	6	.2485	25.69	28.28
0.2770	J				1-1/2	6	6	.2485	25.69	28.28
0.2810	K				1-1/2	6	6	.2485	25.69	28.28
0.2812		9/32			1-1/2	6	6	.2485	24.42	26.48
0.2900	L				1-1/2	6	6	.2792	25.69	28.28
0.2950	M				1-1/2	6	6	.2792	25.69	28.28
0.2953				7.5mm	1-1/2	6	6	.2792	25.69	28.28
0.2969		19/64			1-1/2	6	6	.2792	25.69	28.28
0.3020	N				1-1/2	6	6	.2792	25.69	28.28
0.3115				o/u	1-1/2	6	6	.2792	24.42	26.86
0.3125		5/16			1-1/2	6	6	.2792	23.15	25.44
0.3135				o/u	1-1/2	6	6	.2792	24.42	26.86
0.3150				8.0mm	1-1/2	6	6	.2792	25.69	28.28



433

Straight Flute

435

Right Hand Spiral

435L

Left Hand Spiral

For a complete listing of stocked decimal sizes, please refer to pages 12-13.



PHONE **800.343.2404**

sales@yankeereamer.com

www.yankeereamer.com

8 Chucking Reamers | Straight Shank

HIGH SPEED STEEL



433
Straight
Flute

435
Right Hand
Spiral

435L
Left Hand
Spiral

For a complete listing of stocked decimal sizes, please refer to pages 12-13.

Decimal	Wire	Letter	Fraction	Over/Under	Metric	Flute Length	# of Flutes	Overall Length	Shank Diameter	433 List Price	435/435L List Price
0.3160		O				1-1/2	6	6	.2792	25.69	28.28
0.3230		P				1-1/2	6	6	.2792	27.48	30.25
0.3281			21/64			1-1/2	6	6	.2792	27.48	30.25
0.3320		Q				1-1/2	6	6	.2792	27.48	30.25
0.3346					8.5mm	1-1/2	6	6	.2792	27.48	30.25
0.3390		R				1-1/2	6	6	.2792	27.48	30.25
0.3438			11/32			1-1/2	6	6	.2792	27.48	30.25
0.3480		S				1-3/4	6	7	.3105	27.75	30.53
0.3543					9.0mm	1-3/4	6	7	.3105	27.75	30.53
0.3580		T				1-3/4	6	7	.3105	27.75	30.53
0.3594			23/64			1-3/4	6	7	.3105	27.75	30.53
0.3680		U				1-3/4	6	7	.3105	27.75	30.53
0.3740				o/u	9.5mm	1-3/4	6	7	.3105	26.34	28.98
0.3750			3/8			1-3/4	6	7	.3105	24.96	27.46
0.3760				o/u		1-3/4	6	7	.3105	26.34	28.98
0.3770		V				1-3/4	6	7	.3105	30.15	33.20
0.3860		W				1-3/4	6	7	.3105	30.15	33.20
0.3906			25/64			1-3/4	6	7	.3105	30.15	33.20
0.3937					10.0mm	1-3/4	6	7	.3105	30.15	33.20
0.3970		X				1-3/4	6	7	.3105	30.15	33.20
0.4040		Y				1-3/4	6	7	.3105	31.30	34.45
0.4062			13/32			1-3/4	6	7	.3105	31.30	34.45
0.4130		Z				1-3/4	6	7	.3730	31.30	34.45
0.4134					10.5mm	1-3/4	6	7	.3730	31.30	34.45
0.4219			27/64			1-3/4	6	7	.3730	31.30	34.45
0.4331					11.0mm	1-3/4	6	7	.3730	31.30	34.45
0.4365				o/u		1-3/4	6	7	.3730	29.74	34.45
0.4375			7/16			1-3/4	6	7	.3730	29.74	32.70
0.4385				o/u		1-3/4	6	7	.3730	29.74	34.45
0.4528					11.5mm	1-3/4	6	7	.3730	34.09	37.50
0.4531			29/64			1-3/4	6	7	.3730	34.09	37.50
0.4688			15/32			1-3/4	6	7	.3730	34.09	37.50
0.4724					12.0mm	2	6	8	.4355	34.09	37.50
0.4844			31/64			2	6	8	.4355	34.09	37.50
0.4921					12.5mm	2	6	8	.4355	34.09	37.50
0.4990				o/u		2	6	8	.4355	32.38	37.50
0.5000			1/2			2	6	8	.4355	32.38	35.61
0.5010				o/u		2	6	8	.4355	32.38	37.50
0.5118					13.0mm	2	6	8	.4355	42.23	—
0.5156			33/64			2	6	8	.4355	42.23	—
0.5312			17/32			2	6	8	.4355	40.23	44.27
0.5315					13.5mm	2	6	8	.4355	42.23	—
0.5469			35/64			2	8	8	.4355	40.72	—
0.5512					14.0mm	2	8	8	.4355	40.72	—
0.5615				o/u		2	8	8	.4355	40.72	—
0.5625			9/16			2	8	8	.4355	38.81	42.67
0.5635				o/u		2	8	8	.4355	40.72	—
0.5709					14.5mm	2	8	8	.4355	40.72	—
0.5781			37/64			2	8	8	.4355	40.72	—
0.5906					15.0mm	2	8	8	.4355	40.72	—
0.5938			19/32			2	8	8	.4355	38.81	42.67
0.6094			39/64			2-1/4	8	9	.5615	47.55	—
0.6102					15.5mm	2-1/4	8	9	.5615	47.55	—
0.6240				o/u		2-1/4	8	9	.5615	47.55	—
0.6250			5/8			2-1/4	8	9	.5615	45.44	49.79
0.6260				o/u		2-1/4	8	9	.5615	47.55	—
0.6299					16.0mm	2-1/4	8	9	.5615	47.55	—
0.6406			41/64			2-1/4	8	9	.5615	47.55	—
0.6496					16.5mm	2-1/4	8	9	.5615	47.55	—
0.6562			21/32			2-1/4	8	9	.5615	51.20	52.38
0.6693					17.0mm	2-1/4	8	9	.5615	53.71	—
0.6719			43/64			2-1/4	8	9	.5615	53.71	—
0.6865				o/u		2-1/4	8	9	.5615	53.71	—
0.6875			11/16			2-1/4	8	9	.5615	51.20	56.30
0.6885				o/u		2-1/4	8	9	.5615	57.68	—
0.6890					17.5mm	2-1/4	8	9	.5615	57.68	—
0.7031			45/64			2-1/4	8	9	.5615	57.68	—
0.7087					18.0mm	2-1/4	8	9	.5615	57.68	—
0.7188			23/32			2-1/4	8	9	.5615	57.12	62.84
0.7283					18.5mm	2-1/2	8	9-1/2	.6240	59.95	—
0.7344			47/64			2-1/2	8	9-1/2	.6240	66.41	—

Decimal	Wire Letter	Fraction	Over/Under	Metric	Flute Length	# of Flutes	Overall Length	Shank Diameter	433 List Price	435/435L List Price
0.7480				19.0mm	2-1/2	8	9-1/2	.6240	66.41	—
0.7490				o/u	2-1/2	8	9-1/2	.6240	66.41	—
0.7500		3/4			2-1/2	8	9-1/2	.6240	57.47	62.84
0.7510				o/u	2-1/2	8	9-1/2	.6240	63.94	—
0.7656		49/64			2-1/2	8	9-1/2	.6240	63.94	—
0.7677				19.5mm	2-1/2	8	9-1/2	.6240	63.94	—
0.7812		25/32			2-1/2	8	9-1/2	.6240	62.00	68.15
0.7874				20.0mm	2-1/2	8	9-1/2	.6240	68.47	—
0.7969		51/64			2-1/2	8	9-1/2	.6240	68.47	—
0.8071				20.5mm	2-1/2	8	9-1/2	.6240	68.47	—
0.8115				o/u	2-1/2	8	9-1/2	.6240	68.47	—
0.8125		13/16			2-1/2	8	9-1/2	.6240	62.00	68.15
0.8135				o/u	2-1/2	8	9-1/2	.6240	68.47	—
0.8268				21.0mm	2-1/2	8	9-1/2	.6240	68.47	—
0.8281		53/64			2-1/2	8	9-1/2	.6240	68.47	—
0.8438		27/32			2-1/2	8	9-1/2	.6240	73.31	80.66
0.8465				21.5mm	2-5/8	8	10	.7490	79.81	—
0.8594		55/64			2-5/8	8	10	.7490	79.81	—
0.8661				22.0mm	2-5/8	8	10	.7490	79.81	—
0.8740				o/u	2-5/8	8	10	.7490	79.81	—
0.8750		7/8			2-5/8	8	10	.7490	75.02	82.49
0.8760				o/u	2-5/8	8	10	.7490	81.49	—
0.8858				22.5mm	2-5/8	8	10	.7490	81.49	—
0.8906		57/64			2-5/8	8	10	.7490	81.49	—
0.9055				23.0mm	2-5/8	8	10	.7490	81.49	—
0.9062		29/32			2-5/8	8	10	.7490	80.84	88.94
0.9219		59/64			2-5/8	8	10	.7490	87.30	—
0.9252				23.5mm	2-5/8	8	10	.7490	87.30	—
0.9365				o/u	2-5/8	8	10	.7490	87.30	—
0.9375		15/16			2-5/8	8	10	.7490	80.84	88.94
0.9385				o/u	2-5/8	8	10	.7490	87.30	—
0.9449				24.0mm	2-5/8	8	10	.7490	87.30	—
0.9531		61/64			2-5/8	8	10	.7490	87.30	—
0.9646				24.5mm	2-5/8	8	10	.7490	87.30	—
0.9688		31/32			2-5/8	8	10	.7490	90.56	99.58
0.9843				25.0mm	2-3/4	8	10-1/2	.8740	92.67	—
0.9844		63/64			2-3/4	8	10-1/2	.8740	92.67	—
0.9990				o/u	2-3/4	8	10-1/2	.8740	92.67	—
1.0000		1			2-3/4	8	10-1/2	.8740	91.39	100.53
1.0010				o/u	2-3/4	8	10-1/2	.8740	97.86	—
1.0039				25.5mm	2-3/4	8	10-1/2	.8740	97.86	—
1.0236				26.0mm	2-3/4	8	10-1/2	.8740	127.18	—
1.0312		1-1/32			2-3/4	8	10-1/2	.8740	127.18	—
1.0625		1-1/16			2-3/4	8	10-1/2	.8740	101.31	111.45
1.0938		1-3/32			2-7/8	8	11	.8740	133.54	—
1.1024				28.0mm	2-7/8	8	11	.8740	107.67	—
1.1250		1-1/8			2-7/8	8	11	.8740	107.67	118.46
1.1562		1-5/32			2-7/8	10	11	.9990	151.96	—
1.1811				30.0mm	2-7/8	10	11	.9990	134.25	—
1.1875		1-3/16			2-7/8	10	11	.9990	126.12	138.71
1.2188		1-7/32			3	10	11-1/2	.9990	159.50	—
1.2500		1-1/4			3	10	11-1/2	.9990	133.65	147.02
1.2812		1-9/32			3	10	11-1/2	.9990	181.77	—
1.3125		1-5/16			3	10	11-1/2	.9990	155.89	171.48
1.3438		1-11/32			3-1/4	10	12	.9990	160.61	—
1.3750		1-3/8			3-1/4	10	12	.9990	163.82	180.23
1.4062		1-13/32			3-1/4	10	12	1.2490	201.53	—
1.4375		1-7/16			3-1/4	10	12	1.2490	175.69	193.27
1.4688		1-15/32			3-1/2	10	12-1/2	1.2490	215.03	—
1.5000		1-1/2			3-1/2	10	12-1/2	1.2490	189.14	208.05
1.5625		1-9/16			3-1/2	12	13	1.2490	267.85	294.62
1.6250		1-5/8			3-1/2	12	13	1.2490	267.85	294.62
1.6875		1-11/16			4	12	13-1/2	1.2490	307.59	338.36
1.7500		1-3/4			4	12	13-1/2	1.2490	307.59	338.36
1.8125		1-13/16			4	12	14	1.4990	354.24	389.68
1.8750		1-7/8			4	12	14	1.4990	354.24	389.68
1.9375		1-15/16			4	12	14	1.4990	414.73	456.19
2.0000		2			4	12	14	1.4990	414.73	456.19



433 Straight Flute
435 Right Hand Spiral
435L Left Hand Spiral

For a complete listing of stocked decimal sizes, please refer to pages 12-13.





HIGH SPEED STEEL

433 | Straight Flute



INTERMEDIATE SIZES

LIST PRICE EACH IN QUANTITIES OF:

Size Range	1	2	3-5	6-7	8-11	12-17	18-23	24-35	36-47	48-59	60-71	72-95	96+
0.0100-0.0195	115.92	75.75	56.45	40.95	37.00	31.45	28.45	26.48	25.80	23.60	22.94	22.62	22.08
0.0196-0.0290	105.36	68.84	51.34	37.25	33.63	29.50	25.88	24.10	22.34	21.42	21.39	21.33	21.24
0.0291-0.0390	95.82	62.50	46.66	33.84	30.57	26.82	23.54	21.91	20.32	19.48	18.95	18.71	18.28
0.0391-0.0624	93.51	60.41	45.84	32.35	28.80	24.60	21.92	20.32	18.74	17.83	17.34	17.10	16.66
0.0626-0.1093	91.20	58.35	44.98	30.84	27.02	22.40	20.32	18.71	17.13	16.15	15.73	15.46	15.04
0.1095-0.1249	89.97	57.12	42.29	26.96	23.70	21.65	17.75	16.15	15.90	15.68	15.39	15.12	14.94
0.1251-0.1405	95.82	62.50	42.21	33.84	31.84	26.82	23.54	21.91	20.32	19.48	19.01	18.71	18.06
0.1407-0.1561	94.33	61.50	46.71	32.81	29.43	25.70	22.43	20.83	19.67	19.23	18.78	18.33	17.87
0.1563-0.1718	95.82	59.79	46.45	33.84	30.62	26.82	23.54	21.91	20.32	19.98	19.67	19.48	19.15
0.1720-0.1874	91.88	57.35	46.42	31.52	28.30	25.31	22.27	20.58	20.34	20.04	19.77	19.26	19.01
0.1876-0.2030	98.37	65.57	51.46	37.85	34.64	30.77	27.51	25.97	24.20	22.94	22.40	22.27	22.10
0.2032-0.2187	98.37	65.57	50.89	37.29	34.07	30.20	26.87	25.31	23.70	22.27	21.98	21.72	21.60
0.2189-0.2343	98.78	66.04	51.30	37.76	34.52	30.62	27.34	25.73	24.15	23.17	22.82	22.62	22.43
0.2345-0.2499	98.78	66.04	48.81	35.02	31.76	28.02	24.82	23.22	21.50	21.39	21.07	20.87	20.76
0.2501-0.2968	102.59	69.76	54.97	41.76	38.53	34.45	31.22	29.59	27.87	26.43	26.19	25.94	25.69
0.2970-0.3124	99.76	66.91	52.11	38.61	35.35	31.45	28.13	26.49	26.39	26.17	26.02	25.87	25.69
0.3126-0.3437	104.77	71.41	56.54	40.30	39.06	36.05	32.90	31.22	29.47	28.17	27.87	27.67	27.48
0.3439-0.3593	104.62	71.82	56.93	43.96	40.71	38.22	32.90	31.68	30.05	28.63	28.30	28.11	27.87
0.3595-0.3749	101.61	68.68	53.91	40.49	37.29	33.35	30.13	28.34	28.26	28.17	27.97	27.86	27.75
0.3751-0.3905	106.35	73.57	58.87	45.87	42.65	39.10	35.78	34.15	32.54	30.84	30.69	30.42	30.15
0.3907-0.4218	107.68	74.86	60.03	47.30	44.08	39.85	36.62	35.02	33.39	31.94	31.59	31.45	31.38
0.4220-0.4374	105.68	72.89	57.99	45.18	41.92	37.76	34.45	32.83	32.54	32.47	32.35	31.66	31.30
0.4376-0.4843	110.55	77.69	62.85	50.49	47.26	42.85	38.00	37.26	36.45	35.30	35.02	34.64	34.35
0.4845-0.4999	107.94	75.10	60.28	47.57	44.42	40.02	35.14	35.01	34.74	34.61	34.35	34.21	34.09
0.5001-0.5311	123.80	87.40	69.77	55.66	51.72	46.66	42.34	41.34	40.29	39.75	39.38	39.10	38.92
0.5313-0.5624	130.14	92.95	73.88	59.47	55.06	49.72	46.31	44.50	42.73	41.86	41.36	40.96	40.72
0.5626-0.5937	138.32	98.85	79.76	62.69	59.06	56.27	54.43	51.09	49.24	48.42	47.86	47.52	47.05
0.5939-0.6249	138.66	99.04	79.96	61.72	59.24	56.49	52.98	51.30	49.44	48.63	48.05	47.73	47.55
0.6251-0.6874	146.56	104.68	85.56	69.57	66.30	65.15	59.10	57.35	55.61	54.72	54.16	53.91	53.71
0.6876-0.7187	153.92	109.93	90.86	82.49	73.51	68.36	64.92	63.20	61.48	60.56	60.02	59.58	59.24
0.7189-0.7499	156.84	112.02	93.02	84.85	76.11	70.78	67.26	67.17	67.08	67.02	66.79	66.62	66.41
0.7501-0.8124	166.20	118.73	99.72	91.54	83.39	78.15	74.62	72.86	71.13	70.29	69.77	69.38	68.91
0.8126-0.8437	175.59	125.41	106.43	98.28	90.74	85.57	81.99	80.27	78.54	77.65	77.07	76.77	76.32
0.8439-0.8749	177.99	127.13	108.01	99.88	92.56	87.35	83.77	82.34	81.56	79.42	78.85	78.50	76.99
0.8751-0.9374	187.70	134.08	114.94	106.85	100.23	95.06	91.46	89.74	88.03	87.77	87.59	87.45	87.30
0.9376-0.9687	197.61	141.14	122.94	114.86	108.98	103.77	100.23	98.50	96.76	95.95	95.29	95.10	94.56
0.9689-0.9999	201.14	143.69	124.61	116.32	110.83	105.54	102.10	100.38	98.56	97.71	97.16	96.76	96.37
1.0001-1.0624	215.63	176.77	158.45	155.17	152.01	146.50	145.72	139.42	133.15	132.36	129.33	128.25	127.18
1.0626-1.1249	227.72	189.13	170.07	167.27	163.19	160.89	156.28	149.38	142.50	135.59	134.96	134.32	133.54
1.1251-1.1874	243.18	221.12	187.80	183.18	180.94	176.96	174.29	167.25	160.39	153.52	146.66	139.82	135.86
1.1876-1.2499	256.71	233.87	200.38	195.65	192.99	188.92	185.57	178.13	170.72	163.32	155.89	148.48	141.08
1.2501-1.3749	291.97	250.87	231.70	227.84	225.77	220.67	219.05	211.20	203.26	195.39	193.36	191.36	189.70
1.3751-1.4999	323.00	283.68	265.27	261.18	257.63	254.51	250.83	242.03	233.23	224.42	222.00	218.79	215.03
1.5001-1.6249	455.34	387.04	377.36	367.91	358.72	349.74							
1.6251-1.7499	524.39	445.72	434.57	423.71	413.11	402.78							
1.7501-1.8749	602.23	511.89	499.08	486.59	474.50	462.55							
1.8751-1.9999	705.04	599.30	584.32	569.70	555.44	541.54							

Please Call
For Pricing >>>

Sizes above 2.0000 priced upon request.

435 | Right Hand Spiral



435L | Left Hand Spiral



INTERMEDIATE SIZES

LIST PRICE EACH IN QUANTITIES OF:

Size Range	1	2	3-5	6-7	8-11	12-17	18-23	24-35	36-47	48-59	60-71	72-95	96+
0.0391-0.0624	99.55	64.82	50.74	34.64	29.47	24.93	22.94	20.62	19.05	18.26	17.77	17.66	17.49
0.0626-0.1093	104.84	67.06	51.73	35.48	31.75	27.14	23.33	21.38	19.65	18.54	18.09	17.79	17.17
0.1095-0.1249	102.70	65.69	48.60	30.99	27.24	24.87	20.39	18.54	18.32	18.01	17.70	17.36	17.24
0.1251-0.1405	110.15	71.97	54.96	38.92	35.26	30.89	27.05	25.20	23.33	22.42	21.98	21.49	20.98
0.1407-0.1561	108.48	70.69	53.70	37.55	33.83	29.57	25.86	23.97	22.62	22.11	21.60	21.08	20.58
0.1563-0.1718	110.15	68.75	53.81	38.92	35.26	30.89	27.05	25.20	23.33	22.97	22.62	22.42	21.98
0.1720-0.1874	105.63	65.97	53.38	36.25	32.54	29.10	25.63	23.66	23.40	23.03	22.74	22.15	21.86
0.1876-0.2030	113.14	75.36	59.18	43.54	39.86	35.35	31.69	29.80	26.66	26.39	25.73	25.63	25.41
0.2032-0.2187	113.14	75.36	58.52	42.87	39.16	34.71	30.89	29.10	27.24	25.63	25.31	24.98	24.85
0.2189-0.2343	113.58	75.98	58.97	43.38	39.71	35.26	31.44	29.64	27.76	26.63	26.20	26.01	25.86
0.2345-0.2499	113.58	75.98	56.11	40.23	36.54	32.24	28.99	26.68	26.43	26.33	25.87	25.49	25.34
0.2501-0.2968	112.84	76.71	60.44	45.96	42.40	37.85	34.35	32.54	30.66	29.80	29.06	28.82	28.30
0.2970-0.3124	109.72	73.59	57.30	42.47	38.88	34.60	30.93	29.20	29.04	28.85	28.44	28.34	28.28
0.3126-0.3437	114.63	78.56	62.19	47.85	44.31	39.62	36.19	34.35	32.54	30.98	30.66	30.44	30.24
0.3439-0.3593	115.08	79.00	62.64	48.34	44.79	40.23	36.66	34.85	33.04	31.50	31.15	30.89	30.66
0.3595-0.3749	111.76	75.57	59.30	44.53	41.03	36.66	33.15	31.21	31.04	30.93	30.77	30.62	30.53
0.3751-0.3905	117.00	80.91	64.75	50.47	46.94	42.97	39.37	37.58	35.81	33.93	33.74	33.46	33.20
0.3907-0.4218	118.48	82.37	66.03	52.06	48.50	43.80	40.30	38.51	36.75	35.10	34.78	34.60	34.52
0.4220-0.4374	116.23	80.16	63.78	49.69	46.14	41.51	37.85	36.10	35.78	35.30	35.02	34.64	34.45
0.4376-0.4843	121.62	85.50	69.14	55.54	51.98	47.12	41.80	40.96	40.09	38.82	38.51	38.11	37.78
0.4845-0.4999	118.74	82.65	66.30	52.33	48.85	44.02	38.65	38.40	38.23	37.92	37.78	37.64	37.51
0.5001-0.5311	136.19	96.15	76.73	58.70	56.72	51.34	46.58	45.41	44.32	43.66	43.29	43.00	42.70
0.5313-0.5624	143.16	102.25	81.28	60.54	60.21	54.69	50.92	48.92	46.98	46.06	45.49	45.05	44.59
0.5626-0.5937	146.19	108.73	87.73	67.65	66.67	61.89	58.04	56.20	54.13	53.26	52.64	52.23	51.73
0.5939-0.6249	161.22	115.15	87.96	66.90	67.90	62.12	58.28	56.44	54.39	53.50	52.88	52.49	51.96
0.6251-0.6874	162.60	115.15	94.10	73.11	74.64	71.63	65.00	63.09	61.20	60.19	59.60	59.28	58.75
0.6876-0.7187	169.31	120.93	99.95	86.94	80.86	75.21	71.42	69.54	67.61	66.63	66.01	65.56	65.16
0.7189-0.7499	172.54	123.23	102.31	90.17	83.72	77.86	73.99	72.09	70.13	69.20	68.57	68.31	67.54
0.7501-0.8124	182.82	130.58	109.71	98.77	87.02	85.96	82.08	80.14	78.24	77.33	76.73	76.31	75.84
0.8126-0.8437	193.16	137.98	117.06	100.94	94.42	94.14	90.18	88.29	86.39	85.40	84.80	84.47	83.93
0.8439-0.8749	195.81	139.87	118.81	104.19	96.52	96.10	92.17	90.16	88.42	87.35	86.73	86.37	85.99
0.8751-0.9374	206.51	147.48	126.44	110.27	105.47	104.57	100.41	98.74	96.82	95.85	95.23	95.12	94.33
0.9376-0.9687	219.98	158.14	135.27	125.67	119.88	114.16	110.27	108.38	106.43	105.53	104.82	104.60	104.04
0.9689-0.9999	221.28	158.05	137.03	127.62	121.94	116.11	112.30	110.40	108.42	107.5	106.82	106.43	106.00
1.0001-1.0624	237.20	191.33	183.45	175.60	168.81	164.61	160.30	153.42	146.45	144.21	142.00	141.37	139.19
1.0626-1.1249	250.48	208.32	199.57	192.67	185.79	179.52	171.92	164.34	156.73	153.88	150.98	149.68	146.80
1.1251-1.1874	267.51	229.56	220.36	213.50	206.55	199.01	191.51	183.95	176.41	168.85	161.32	153.80	146.26
1.1876-1.2499	282.36	243.31	237.20	228.21	220.43	212.27	204.08	195.95	187.80	179.62	175.38	163.34	155.16
1.2501-1.3749	321.19	274.38	266.32	257.59	248.87	245.28	236.25	230.72	222.01	214.90	209.40	200.71	195.16
1.3751-1.4999	355.27	311.27	302.31	296.36	290.15	285.58	275.92	266.24	256.55	246.87	237.20	230.71	222.57
1.5001-1.6249	487.24	414.12	403.79	393.66	383.83	374.26							
1.6251-1.7499	561.08	476.94	464.99	453.36	442.04	430.99							
1.7501-1.8749	644.40	547.73	534.00	520.63	507.64	494.95							
1.8751-1.9999	754.39	641.24	625.21	609.58	594.32	579.46							

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STOCKED INTERMEDIATE SIZES



STANDARD SIZES

INTERMEDIATE SIZES

.0135 #80	.0505	.0885	.1255	.1635	.2015	.2390	.2770 J
.0140	.0510	.0890 #43	.1260 O/U	.1640	.2020	.2395	.2775
.0145 #79	.0515	.0895	.1265	.1645	.2025	.2400	.2780
.0150	.0520 #55	.0900	.1270	.1650	.2030	.2405	.2785
.0155	.0525	.0905	.1275	.1655	.2031 13/64	.2410	.2790
.0156 1/64	.0530	.0910	.1280	.1660 #19	.2035	.2415	.2795
.0160 #78	.0535	.0915	.1285 #30	.1665	.2040 #6	.2420 C	.2800
.0165	.0540	.0920	.1290	.1670	.2045	.2425	.2805
.0170	.0545	.0925	.1295	.1675	.2050	.2430	.2810 K
.0175	.0550 #54	.0930	.1300	.1680	.2055 #5	.2435	.2812 9/32
.0180 #77	.0555	.0935 #42	.1305	.1685	.2060	.2440	.2815
.0185	.0560	.0938 3/32	.1310	.1690	.2065	.2445	.2820
.0190	.0565	.0940	.1315	.1695 #18	.2070	.2450	.2825
.0195	.0570	.0945	.1320	.1700	.2075	.2455	.2830
.0200 #76	.0575	.0950	.1325	.1705	.2080	.2460 D	.2835
.0205	.0580	.0955	.1330	.1710	.2085	.2465	.2840
.0210 #75	.0585	.0960 #41	.1335	.1715	.2090 #4	.2470	.2845
.0215	.0590	.0965	.1340	.1719 11/64	.2095	.2475	.2850
.0220	.0591 1.5mm	.0970	.1345	.1720	.2100	.2480 D/P	.2855
.0225 #74	.0595 #53	.0975	.1350	.1725	.2105	.2485	.2860
.0230	.0600	.0980 #40	.1355	.1730 #17	.2110	.2490 O/U	.2865
.0235	.0605	.0984 2.5mm	.1360 #29	.1735	.2115	.2495 D/P	.2870
.0240 #73	.0610	.0985	.1365	.1740	.2120	.2500 E 1/4	.2875
.0245	.0615	.0990	.1370	.1745	.2125	.2505	.2880
.0250 #72	.0620	.0995 #39	.1375	.1750	.2130 #3	.2510 O/U	.2885
.0255	.0625 1/16	.1000	.1378 3.5mm	.1755	.2135	.2515	.2890
.0260 #71	.0630	.1005	.1380	.1760	.2140	.2520	.2895
.0265	.0635 #52	.1010	.1385	.1765	.2145	.2525	.2900 L
.0270	.0640	.1015 #38	.1390	.1770 #16	.2150	.2530	.2905
.0275	.0645	.1020	.1395	.1772 4.5mm	.2155	.2535	.2910
.0280 #70	.0650	.1025	.1400	.1775	.2160	.2540	.2915
.0285	.0655	.1030	.1405 #28	.1780	.2165 5.5mm	.2545	.2920
.0290	.0660	.1035	.1406 9/64	.1785	.2170	.2550	.2925
.0292 #69	.0665	.1040 #37	.1410	.1790	.2175	.2555	.2930
.0295	.0670 #51	.1045	.1415	.1795	.2180	.2559 6.5mm	.2935
.0300	.0675	.1050	.1420	.1800 #15	.2185	.2560	.2940
.0305	.0680	.1055	.1425	.1805	.2188 7/32	.2565	.2945
.0310 #68	.0685	.1060	.1430	.1810	.2190	.2570 F	.2950 M
.0312 1/32	.0690	.1065 #36	.1435	.1815	.2195	.2575	.2953 7.5mm
.0315	.0695	.1070	.1440 #27	.1820 #14	.2200	.2580	.2955
.0320 #67	.0700 #50	.1075	.1445	.1825	.2205	.2585	.2960
.0325	.0705	.1080	.1450	.1830	.2210 #2	.2590	.2965
.0330 #66	.0710	.1085	.1455	.1835	.2215	.2595	.2969 19/64
.0335	.0715	.1090	.1460	.1840	.2220	.2600	.2970
.0340	.0720	.1094 7/64	.1465	.1845	.2225	.2605	.2975
.0345	.0725	.1095	.1470 #26	.1850 #13	.2230	.2610 G	.2980
.0350 #65	.0730 #49	.1100 #35	.1475	.1855 D/P	.2235	.2615	.2985
.0355	.0735	.1105	.1480	.1860	.2240	.2620	.2990
.0360 #64	.0740	.1110 #34	.1485	.1865 O/U	.2245	.2625	.2995
.0365	.0745	.1115	.1490	.1870 D/P	.2250	.2630	.3000
.0370 #63	.0750	.1120	.1495 #25	.1875 3/16	.2255	.2635	.3005
.0375	.0755	.1125	.1500	.1880	.2260	.2640	.3010
.0380 #62	.0760 #48	.1130 #33	.1505	.1885 O/U	.2265	.2645	.3015
.0385	.0765	.1135	.1510	.1890 #12	.2270	.2650	.3020 N
.0390 #61	.0770	.1140	.1515	.1895	.2275	.2655	.3025
.0394 1.0mm	.0775	.1145	.1520 #24	.1900	.2280 #1	.2656 17/64	.3030
.0395	.0780	.1150	.1525	.1905	.2285	.2660 H	.3035
.0400 #60	.0781 5/64	.1155	.1530	.1910 #11	.2290	.2665	.3040
.0405	.0785 #47	.1160 #32	.1535	.1915	.2295	.2670	.3045
.0410 #59	.0787 2.0mm	.1165	.1540 #23	.1920	.2300	.2675	.3050
.0415	.0790	.1170	.1545	.1925	.2305	.2680	.3055
.0420 #58	.0795	.1175	.1550	.1930	.2310	.2685	.3060
.0425	.0800	.1180	.1555	.1935 #10	.2315	.2690	.3065
.0430 #57	.0805	.1181 3.0mm	.1560	.1940	.2320	.2695	.3070
.0435	.0810 #46	.1185	.1562 5/32	.1945	.2325	.2700	.3075
.0440	.0815	.1190	.1565	.1950	.2330	.2705	.3080
.0445	.0820 #45	.1195	.1570 #22	.1955	.2335	.2710	.3085
.0450	.0825	.1200 #31	.1575 4.0mm	.1960 #9	.2340 A	.2715	.3090
.0455	.0830	.1205	.1580	.1965	.2344 15/64	.2720 I	.3095
.0460	.0835	.1210	.1585	.1969 5.0mm	.2345	.2725	.3100
.0465 #56	.0840	.1215	.1590 #21	.1970	.2350	.2730	.3105 D/P
.0469 3/64	.0845	.1220	.1595	.1975	.2355	.2735	.3110
.0470	.0850	.1225	.1600	.1980	.2360	.2740	.3115 O/U
.0475	.0855	.1230 D/P	.1605	.1985	.2362 6.0mm	.2745	.3120 D/P
.0480	.0860 #44	.1235	.1610 #20	.1990 #8	.2365	.2750	.3125 5/16
.0485	.0865	.1240 O/U	.1615	.1995	.2370	.2755	.3130
.0490	.0870	.1245	.1620	.2000	.2375	.2756 7.0mm	.3135 O/U
.0495	.0875	.1247 D/P	.1625	.2005	.2380 B	.2760	.3140
.0500	.0880	.1250 1/8	.1630	.2010 #7	.2385	.2765	.3145

STOCKED INTERMEDIATE SIZES

STANDARD SIZES

INTERMEDIATE SIZES

.3150 8.0mm	.3530	.3910	.4285	.4665	.5010 O/U	.6885 O/U	.9345
.3155	.3535	.3915	.4290	.4670	.5015	.6890 17.5mm	.9350
.3160 O	.3540	.3920	.4295	.4675	.5020	.6895	.9355
.3165	.3543 9.0mm	.3925	.4300	.4680	.5025	.6900	.9360
.3170	.3545	.3930	.4305	.4685	.5030	.6905	.9365 O/U
.3175	.3550	.3935	.4310	.4688 15/32	.5035	.7031 45/64	.9370
.3180	.3555	.3937 10.0mm	.4315	.4690	.5040	.7087 18mm	.9375 15/16
.3185	.3560	.3940	.4320	.4695	.5045	.7188 23/32	.9380
.3190	.3565	.3945	.4325	.4700	.5050	.7283 18.5mm	.9385 O/U
.3195	.3570	.3950	.4330	.4705	.5060	.7344 47/64	.9390
.3200	.3575	.3955	.4331 11.0mm	.4710	.5070	.7470	.9395
.3205	.3580 T	.3960	.4335	.4715	.5080	.7475	.9400
.3210	.3585	.3965	.4340	.4720	.5090	.7480 19mm	.9405
.3215	.3590	.3970 X	.4345	.4724 12.0mm	.5100	.7485	.9449 24mm
.3220	.3594 23/64	.3975	.4350	.4725	.5118 13mm	.7490 O/U	.9531 61/64
.3225	.3595	.3980	.4355 D/P	.4730	.5150	.7495	.9646 24.5mm
.3230 P	.3600	.3985	.4360	.4735	.5156 33/64	.7500 3/4	.9688 31/32
.3235	.3605	.3990	.4365 O/U	.4740	.5160	.7505	.9843 25mm
.3240	.3610	.3995	.4370 D/P	.4745	.5200	.7510 O/U	.9844 63/64
.3245	.3615	.4000	.4375 7/16	.4750	.5312 17/32	.7515	.9970
.3250	.3620	.4005	.4380	.4755	.5315 13.5mm	.7520	.9975
.3255	.3625	.4010	.4385 O/U	.4760	.5469 35/64	.7525	.9980
.3260	.3630	.4015	.4390	.4765	.5512 14mm	.7530	.9985
.3265	.3635	.4020	.4395	.4770	.5600	.7540	.9990 O/U
.3270	.3640	.4025	.4400	.4775	.5605	.7550	.9995
.3275	.3645	.4030	.4405	.4780	.5610	.7570	1.0000 1"
.3280	.3650	.4035	.4410	.4785	.5615 O/U	.7600	1.0005
.3281 21/64	.3655	.4040 Y	.4415	.4790	.5620	.7656 49/64	1.0010 O/U
.3285	.3660	.4045	.4420	.4795	.5625 9/16	.7677 19.5mm	1.0015
.3290	.3665	.4050	.4425	.4800	.5630	.7812 25/32	1.0020
.3295	.3670	.4055	.4430	.4805	.5635 O/U	.7874 20mm	1.0025
.3300	.3675	.4060	.4435	.4810	.5640	.7969 51/64	1.0030
.3305	.3680 U	.4062 13/32	.4440	.4815	.5645	.8071 20.5mm	1.0039 25.5mm
.3310	.3685	.4065	.4445	.4820	.5650	.8095	1.0236 26mm
.3315	.3690	.4070	.4450	.4825	.5655	.8100	1.0312 1-1/32
.3320 Q	.3695	.4075	.4455	.4830	.5709 14.5mm	.8105	1.0625 1-1/16
.3325	.3700	.4080	.4460	.4835	.5781 37/64	.8110	1.0938 1-3/32
.3330	.3705	.4085	.4465	.4840	.5790	.8115 O/U	1.1024 28mm
.3335	.3710	.4090	.4470	.4844 31/64	.5906 15mm	.8120	1.1250 1-1/8
.3340	.3715	.4095	.4475	.4845	.5938 19/32	.8125 13/16	1.1562 1-5/32
.3345	.3720	.4100	.4480	.4850	.6094 39/64	.8130	1.1811 30mm
.3346 8.5mm	.3725	.4105	.4485	.4855	.6102 15.5mm	.8135 O/U	1.1875 1-3/16
.3350	.3730 D/P	.4110	.4490	.4860	.6200	.8140	1.2188 1-7/32
.3355	.3735	.4115	.4495	.4865	.6220	.8145	1.2500 1-1/4
.3360	.3740 O/U 9.5mm	.4120	.4500	.4870	.6225	.8150	1.2598 32mm
.3365	.3745 D/P	.4125	.4505	.4875	.6230	.8155	1.2812 1-9/32
.3370	.3750 3/8	.4130 Z	.4510	.4880	.6235	.8268 21mm	1.3125 1-5/16
.3375	.3755	.4134 10.5mm	.4515	.4885	.6240 O/U	.8281 53/64	1.3386 34mm
.3380	.3760 O/U	.4135	.4520	.4890	.6245	.8438 27/32	1.3438 1-11/32
.3385	.3765	.4140	.4525	.4895	.6250 5/8	.8465 21.5mm	1.3750 1-3/8
.3390 R	.3770 V	.4145	.4528 11.5mm	.4900	.6255	.8594 55/64	1.4062 1-13/32
.3395	.3775	.4150	.4530	.4905	.6260 O/U	.8661 22mm	1.4173 36mm
.3400	.3780	.4155	.4531 29/64	.4910	.6265	.8720	1.4375 1-7/16
.3405	.3785	.4160	.4535	.4915	.6270	.8725	1.4688 1-15/32
.3410	.3790	.4165	.4540	.4920	.6275	.8730	1.4961 38mm
.3415	.3795	.4170	.4545	.4921 12.5mm	.6280	.8735	1.5000 1-1/2
.3420	.3800	.4175	.4550	.4925	.6299 16.0mm	.8740 O/U	1.5312 1-17/32
.3425	.3805	.4180	.4555	.4930	.6300	.8745	1.5625 1-9/16
.3430	.3810	.4185	.4560	.4935	.6330	.8750 7/8	1.5748 40mm
.3435	.3815	.4190	.4565	.4940	.6350	.8755	1.5938 1-19/32
.3438 11/32	.3820	.4195	.4570	.4945	.6406 41/64	.8760 O/U	1.6250 1-5/8
.3440	.3825	.4200	.4575	.4950	.6496 16.5mm	.8765	1.6562 1-21/32
.3445	.3830	.4205	.4580	.4955	.6562 21/32	.8770	1.6875 1-11/16
.3450	.3835	.4210	.4585	.4960	.6693 17.0mm	.8775	1.7188 1-23/32
.3455	.3840	.4215	.4590	.4965	.6719 43/64	.8780	1.7500 1-3/4
.3460	.3845	.4219 27/64	.4595	.4970	.6845	.8858 22.5mm	1.7812 1-25/32
.3465	.3850	.4220	.4600	.4975	.6850	.8906 57/64	1.8125 1-13/16
.3470	.3855	.4225	.4605	.4980 D/P	.6855		1.8438 1-27/32
.3475	.3860 W	.4230	.4610	.4985	.6860	.9055 23mm	1.8750 1-7/8
.3480 S	.3865	.4235	.4615	.4990 O/U	.6865 O/U	.9062 29/32	1.9062 1-29/32
.3485	.3870	.4240	.4620	.4995 D/P	.6870	.9219 59/64	1.9375 1-15/16
.3490	.3875	.4245	.4625	.5000 1/2	.6875 11/16	.9252 23.5mm	1.9688 1-31/32
.3495	.3880	.4250	.4630	.5005	.6880	.9340	2.0000 2
.3500	.3885	.4255	.4635				
.3505	.3890	.4260	.4640				
.3510	.3895	.4265	.4645				
.3515	.3900	.4270	.4650				
.3520	.3905	.4275	.4655				
.3525	.3906 25/64	.4280	.4660				



14 Cobalt Chucking Reamers | Straight Shank

M-42, 8% Cobalt



1433
Straight
Flute



1435
Right Hand
Spiral

Decimal	Wire	Letter	Fraction	Over/ Under	Metric	Flute Length	# of Flutes	Overall Length	Shank Diameter	1433 List Price	1435 List Price
0.0135	#80					3/8	2	3/4	.0135	23.53	
0.0145	#79					3/8	2	3/4	.0145	23.53	
0.0156			1/64			3/8	2	3/4	.0156	23.53	
0.0160	#78					3/8	2	7/8	.0160	23.53	
0.0180	#77					3/8	2	7/8	.0180	23.53	
0.0200	#76					3/8	2	7/8	.0200	23.53	
0.0210	#75					1/2	3	1	.0210	23.53	
0.0225	#74					1/2	3	1	.0225	23.53	
0.0240	#73					1/2	3	1-1/8	.0240	23.53	
0.0250	#72					1/2	3	1-1/8	.0250	23.53	
0.0260	#71					1/2	3	1-1/4	.0260	23.53	
0.0280	#70					1/2	3	1-1/4	.0280	23.53	
0.0292	#69					1/2	3	1-3/8	.0292	23.53	
0.0310	#68					1/2	3	1-3/8	.0310	23.53	
0.0312			1/32			1/2	3	1-3/8	.0312	19.36	
0.0320	#67					1/2	3	1-3/8	.0320	19.36	
0.0330	#66					1/2	3	1-3/8	.0330	19.36	
0.0350	#65					1/2	3	1-1/2	.0350	19.36	
0.0360	#64					1/2	3	1-1/2	.0360	19.36	
0.0370	#63					1/2	3	1-1/2	.0370	19.36	
0.0380	#62					1/2	3	1-1/2	.0380	19.36	
0.0390	#61					1/2	3	1-1/2	.0390	19.36	
0.0394					1.0mm	1/2	4	2-1/2	.0394	19.05	22.40
0.0400	#60					1/2	4	2-1/2	.0390	19.05	22.40
0.0410	#59					1/2	4	2-1/2	.0390	19.05	22.40
0.0420	#58					1/2	4	2-1/2	.0390	19.05	22.40
0.0430	#57					1/2	4	2-1/2	.0390	19.05	22.40
0.0465	#56					1/2	4	2-1/2	.0455	19.05	22.40
0.0469			3/64			1/2	4	2-1/2	.0455	19.05	22.40
0.0520	#55					1/2	4	2-1/2	.0510	19.05	22.40
0.0550	#54					1/2	4	2-1/2	.0510	19.05	22.40
0.0591					1.5mm	1/2	4	2-1/2	.0510	19.05	22.40
0.0595	#53					1/2	4	2-1/2	.0585	19.05	22.40
0.0625			1/16			1/2	4	2-1/2	.0585	19.05	22.40
0.0635	#52					1/2	4	2-1/2	.0585	19.05	22.40
0.0670	#51					3/4	4	3	.0660	15.35	18.05
0.0700	#50					3/4	4	3	.0660	15.35	18.05
0.0730	#49					3/4	4	3	.0660	15.35	18.05
0.0760	#48					3/4	4	3	.0720	15.35	18.05
0.0781			5/64			3/4	4	3	.0720	15.35	18.05
0.0785	#47					3/4	4	3	.0720	15.35	18.05
0.0787					2.0mm	3/4	4	3	.0720	15.35	18.05
0.0810	#46					3/4	4	3	.0771	15.35	18.05
0.0820	#45					3/4	4	3	.0771	15.35	18.05
0.0860	#44					3/4	4	3	.0810	15.35	18.05
0.0890	#43					3/4	4	3	.0810	15.35	18.05
0.0935	#42					3/4	4	3	.0880	15.35	18.05
0.0938			3/32			3/4	4	3	.0880	15.35	18.05
0.0960	#41					7/8	4	3-1/2	.0928	15.46	18.22
0.0980	#40					7/8	4	3-1/2	.0928	15.46	18.22
0.0984					2.5mm	7/8	4	3-1/2	.0928	15.46	18.22
0.0995	#39					7/8	4	3-1/2	.0928	15.46	18.22
0.1015	#38					7/8	4	3-1/2	.0950	15.46	18.22
0.1040	#37					7/8	4	3-1/2	.0950	15.46	18.22
0.1065	#36					7/8	4	3-1/2	.1030	15.46	18.22
0.1094			7/64			7/8	4	3-1/2	.1030	15.93	18.77
0.1100	#35					7/8	4	3-1/2	.1030	15.93	18.77
0.1110	#34					7/8	4	3-1/2	.1055	15.93	18.77
0.1130	#33					7/8	4	3-1/2	.1055	15.93	18.77
0.1160	#32					7/8	4	3-1/2	.1120	15.93	18.77
0.1181					3.0mm	7/8	4	3-1/2	.1120	15.93	18.77
0.1200	#31					7/8	4	3-1/2	.1120	15.93	18.77
0.1240					o/u	7/8	4	3-1/2	.1190	15.93	18.77
0.1250			1/8			7/8	4	3-1/2	.1190	12.74	16.87
0.1260					o/u	7/8	4	3-1/2	.1190	15.93	18.77
0.1285	#30					7/8	4	3-1/2	.1190	15.93	18.77

Decimal	Wire	Letter	Fraction	Over/ Under	Metric	Flute Length	# of Flutes	Overall Length	Shank Diameter	1433 List Price	1435 List Price
0.1360	#29					1	4	4	.1275	19.04	22.42
0.1378					3.5mm	1	4	4	.1350	19.04	22.42
0.1405	#28					1	4	4	.1350	19.04	22.42
0.1406			9/64			1	4	4	.1350	19.04	22.42
0.1440	#27					1	4	4	.1350	19.04	22.42
0.1470	#26					1	4	4	.1430	19.04	22.42
0.1495	#25					1	4	4	.1430	19.04	22.42
0.1520	#24					1	4	4	.1460	19.04	22.42
0.1540	#23					1	4	4	.1460	19.04	22.42
0.1562			5/32			1	4	4	.1510	17.10	22.42
0.1570	#22					1	6	4	.1510	19.04	22.42
0.1575					4.0mm	1	6	4	.1510	19.04	22.42
0.1590	#21					1-1/8	6	4-1/2	.1530	20.34	23.95
0.1610	#20					1-1/8	6	4-1/2	.1530	20.34	23.95
0.1660	#19					1-1/8	6	4-1/2	.1595	20.34	23.95
0.1695	#18					1-1/8	6	4-1/2	.1595	20.34	23.95
0.1719			11/64			1-1/8	6	4-1/2	.1645	20.34	23.95
0.1730	#17					1-1/8	6	4-1/2	.1645	20.34	23.95
0.1770	#16					1-1/8	6	4-1/2	.1704	20.34	23.95
0.1772					4.5mm	1-1/8	6	4-1/2	.1704	20.34	23.95
0.1800	#15					1-1/8	6	4-1/2	.1755	20.34	23.95
0.1820	#14					1-1/8	6	4-1/2	.1755	20.34	23.95
0.1850	#13					1-1/8	6	4-1/2	.1805	20.34	23.95
0.1865				o/u		1-1/8	6	4-1/2	.1805	20.34	23.95
0.1875			3/16			1-1/8	6	4-1/2	.1805	18.32	22.75
0.1885				o/u		1-1/8	6	4-1/2	.1805	20.35	23.95
0.1890	#12					1-1/8	6	4-1/2	.1805	20.35	23.95
0.1910	#11					1-1/4	6	5	.1860	24.58	26.85
0.1935	#10					1-1/4	6	5	.1860	24.58	26.85
0.1960	#9					1-1/4	6	5	.1895	24.58	26.85
0.1969					5.0mm	1-1/4	6	5	.1895	24.58	26.85
0.1990	#8					1-1/4	6	5	.1895	24.58	26.85
0.2010	#7					1-1/4	6	5	.1945	24.58	26.85
0.2031			13/64			1-1/4	6	5	.1945	24.58	26.85
0.2040	#6					1-1/4	6	5	.1945	24.58	26.85
0.2055	#5					1-1/4	6	5	.2016	24.58	26.85
0.2090	#4					1-1/4	6	5	.2016	24.58	26.85
0.2130	#3					1-1/4	6	5	.2075	24.58	26.85
0.2165					5.5mm	1-1/4	6	5	.2075	24.58	26.85
0.2188			7/32			1-1/4	6	5	.2075	24.58	26.85
0.2210	#2					1-1/2	6	6	.2173	25.28	27.60
0.2280	#1					1-1/2	6	6	.2173	25.28	27.60
0.2340		A				1-1/2	6	6	.2265	25.28	27.60
0.2344			15/64			1-1/2	6	6	.2265	25.28	27.60
0.2362					6.0mm	1-1/2	6	6	.2265	25.41	29.05
0.2380		B				1-1/2	6	6	.2329	25.41	29.05
0.2420		C				1-1/2	6	6	.2329	25.41	29.05
0.2460		D				1-1/2	6	6	.2329	23.09	26.39
0.2490				o/u		1-1/2	6	6	.2405	22.86	26.14
0.2500		E	1/4			1-1/2	6	6	.2405	21.60	24.70
0.2510				o/u		1-1/2	6	6	.2405	22.86	26.14
0.2559					6.5mm	1-1/2	6	6	.2405	25.41	29.05
0.2570		F				1-1/2	6	6	.2485	25.41	29.05
0.2610		G				1-1/2	6	6	.2485	25.41	29.05
0.2656			17/64			1-1/2	6	6	.2485	34.46	35.83
0.2660		H				1-1/2	6	6	.2485	34.46	35.83
0.2720		I				1-1/2	6	6	.2485	34.46	35.83
0.2756					7.0mm	1-1/2	6	6	.2485	34.46	35.83
0.2770		J				1-1/2	6	6	.2485	34.46	35.83
0.2810		K				1-1/2	6	6	.2485	34.46	35.83
0.2812			9/32			1-1/2	6	6	.2485	32.73	34.07
0.2900		L				1-1/2	6	6	.2792	34.46	35.83
0.2950		M				1-1/2	6	6	.2792	34.46	35.83
0.2953					7.5mm	1-1/2	6	6	.2792	34.46	35.83
0.2969			19/64			1-1/2	6	6	.2792	34.46	35.83
0.3020		N				1-1/2	6	6	.2792	34.46	35.83



1433
Straight
Flute



1435
Right Hand
Spiral





M-42, 8% COBALT



1433
Straight
Flute



1435
Right Hand
Spiral

Decimal	Wire	Letter	Fraction	Over/ Under	Metric	Flute Length	# of Flutes	Overall Length	Shank Diameter	1433 List Price	1435 List Price
0.3115				o/u		1-1/2	6	6	.2792	32.73	34.07
0.3125			5/16			1-1/2	6	6	.2792	30.99	32.27
0.3135				o/u		1-1/2	6	6	.2792	32.73	34.07
0.3150					8.0mm	1-1/2	6	6	.2792	34.46	35.83
0.3160		O				1-1/2	6	6	.2792	34.46	35.83
0.3230		P				1-1/2	6	6	.2792	37.11	38.61
0.3281			21/64			1-1/2	6	6	.2792	37.11	38.61
0.3320		Q				1-1/2	6	6	.2792	37.11	38.61
0.3346					8.5mm	1-1/2	6	6	.2792	37.11	38.61
0.3390		R				1-1/2	6	6	.2792	37.11	38.61
0.3438			11/32			1-1/2	6	6	.2792	37.11	38.61
0.3480		S				1-3/4	6	7	.3105	37.76	39.13
0.3543					9.0mm	1-3/4	6	7	.3105	37.76	39.13
0.3580		T				1-3/4	6	7	.3105	37.76	39.13
0.3594			23/64			1-3/4	6	7	.3105	37.76	39.13
0.3680		U				1-3/4	6	7	.3105	37.76	39.13
0.3740				o/u	9.5mm	1-3/4	6	7	.3105	35.82	37.17
0.3750			3/8			1-3/4	6	7	.3105	33.95	35.27
0.3760				o/u		1-3/4	6	7	.3105	35.82	37.17
0.3770		V				1-3/4	6	7	.3105	46.00	49.29
0.3860		W				1-3/4	6	7	.3105	46.00	49.29
0.3906			25/64			1-3/4	6	7	.3105	46.00	49.29
0.3937					10.0mm	1-3/4	6	7	.3105	46.00	49.29
0.3970		X				1-3/4	6	7	.3105	46.00	49.29
0.4040		Y				1-3/4	6	7	.3105	46.00	49.29
0.4062			13/32			1-3/4	6	7	.3105	46.00	49.29
0.4130		Z				1-3/4	6	7	.3730	46.00	49.29
0.4134					10.5mm	1-3/4	6	7	.3730	46.00	49.29
0.4219			27/64			1-3/4	6	7	.3730	46.00	49.29
0.4331					11.0mm	1-3/4	6	7	.3730	46.00	49.29
0.4365				o/u		1-3/4	6	7	.3730	46.00	49.29
0.4375			7/16			1-3/4	6	7	.3730	43.72	46.82
0.4385				o/u		1-3/4	6	7	.3730	46.00	49.29
0.4528					11.5mm	1-3/4	6	7	.3730	52.73	56.47
0.4531			29/64			1-3/4	6	7	.3730	52.73	56.47
0.4688			15/32			1-3/4	6	7	.3730	52.73	56.47
0.4724					12.0mm	2	6	8	.4355	52.73	56.47
0.4844			31/64			2	6	8	.4355	52.73	56.47
0.4921					12.5mm	2	6	8	.4355	52.73	56.47
0.4990				o/u		2	6	8	.4355	52.73	56.47
0.5000			1/2			2	6	8	.4355	50.09	53.65
0.5010				o/u		2	6	8	.4355	52.73	56.47
0.5118					13.0mm	2	6	8	.4355	—	—
0.5156			33/64			2	6	8	.4355	—	—
0.5312			17/32			2	6	8	.4355	59.16	63.40
0.5315					13.5mm	2	6	8	.4355	—	—
0.5469			35/64			2	8	8	.4355	—	—
0.5512					14.0mm	2	8	8	.4355	—	—
0.5615				o/u		2	8	8	.4355	—	—
0.5625			9/16			2	8	8	.4355	57.03	61.12
0.5635				o/u		2	8	8	.4355	—	—
0.5709					14.5mm	2	8	8	.4355	—	—
0.5781			37/64			2	8	8	.4355	—	—
0.5906					15.0mm	2	8	8	.4355	—	—
0.5938			19/32			2	8	8	.4355	57.03	61.12
0.6094			39/64			2-1/4	8	9	.5615	—	—
0.6102					15.5mm	2-1/4	8	9	.5615	—	—
0.6240				o/u		2-1/4	8	9	.5615	—	—
0.6250			5/8			2-1/4	8	9	.5615	66.55	71.32
0.6260				o/u		2-1/4	8	9	.5615	—	—
0.6299					16.0mm	2-1/4	8	9	.5615	—	—
0.6406			41/64			2-1/4	8	9	.5615	—	—
0.6496					16.5mm	2-1/4	8	9	.5615	—	—
0.6562			21/32			2-1/4	8	9	.5615	75.23	80.60
0.6693					17.0mm	2-1/4	8	9	.5615	—	—
0.6719			43/64			2-1/4	8	9	.5615	—	—

Decimal	Wire	Letter	Fraction	Over/ Under	Metric	Flute Length	# of Flutes	Overall Length	Shank Diameter	1433 List Price	1435 List Price
0.6865				o/u		2-1/4	8	9	.5615	—	—
0.6875			11/16			2-1/4	8	9	.5615	75.23	80.60
0.6885				o/u		2-1/4	8	9	.5615	—	—
0.6890					17.5mm	2-1/4	8	9	.5615	—	—
0.7031			45/64			2-1/4	8	9	.5615	—	—
0.7087					18.0mm	2-1/4	8	9	.5615	—	—
0.7188			23/32			2-1/4	8	9	.5615	83.97	89.97
0.7283					18.5mm	2-1/2	8	9-1/2	.6240	—	—
0.7344			47/64			2-1/2	8	9-1/2	.6240	—	—
0.7480					19.0mm	2-1/2	8	9-1/2	.6240	—	—
0.7490				o/u		2-1/2	8	9-1/2	.6240	—	—
0.7500			3/4			2-1/2	8	9-1/2	.6240	84.47	90.48
0.7510				o/u		2-1/2	8	9-1/2	.6240	—	—
0.7656			49/64			2-1/2	8	9-1/2	.6240	—	—
0.7677					19.5mm	2-1/2	8	9-1/2	.6240	—	—
0.7812			25/32			2-1/2	8	9-1/2	.6240	91.10	97.61
0.7874					20.0mm	2-1/2	8	9-1/2	.6240	—	—
0.7969			51/64			2-1/2	8	9-1/2	.6240	—	—
0.8071					20.5mm	2-1/2	8	9-1/2	.6240	—	—
0.8115				o/u		2-1/2	8	9-1/2	.6240	—	—
0.8125			13/16			2-1/2	8	9-1/2	.6240	91.10	97.61
0.8135				o/u		2-1/2	8	9-1/2	.6240	—	—
0.8268					21.0mm	2-1/2	8	9-1/2	.6240	—	—
0.8281			53/64			2-1/2	8	9-1/2	.6240	—	—
0.8438			27/32			2-1/2	8	9-1/2	.6240	107.78	115.49
0.8465					21.5mm	2-5/8	8	10	.7490	—	—
0.8594			55/64			2-5/8	8	10	.7490	—	—
0.8661					22.0mm	2-5/8	8	10	.7490	—	—
0.8740				o/u		2-5/8	8	10	.7490	—	—
0.8750			7/8			2-5/8	8	10	.7490	110.28	118.15
0.8760				o/u		2-5/8	8	10	.7490	—	—
0.8858					22.5mm	2-5/8	8	10	.7490	—	—
0.8906			57/64			2-5/8	8	10	.7490	—	—
0.9055					23.0mm	2-5/8	8	10	.7490	—	—
0.9062			29/32			2-5/8	8	10	.7490	118.83	127.32
0.9219			59/64			2-5/8	8	10	.7490	—	—
0.9252					23.5mm	2-5/8	8	10	.7490	—	—
0.9365				o/u		2-5/8	8	10	.7490	—	—
0.9375			15/16			2-5/8	8	10	.7490	118.83	127.32
0.9385				o/u		2-5/8	8	10	.7490	—	—
0.9449					24.0mm	2-5/8	8	10	.7490	—	—
0.9531			61/64			2-5/8	8	10	.7490	—	—
0.9646					24.5mm	2-5/8	8	10	.7490	—	—
0.9688			31/32			2-5/8	8	10	.7490	133.09	142.59
0.9843					25.0mm	2-3/4	8	10-1/2	.8740	—	—
0.9844			63/64			2-3/4	8	10-1/2	.8740	—	—
0.9990				o/u		2-3/4	8	10-1/2	.8740	—	—
1.0000			1			2-3/4	8	10-1/2	.8740	134.34	143.74
1.0010				o/u		2-3/4	8	10-1/2	.8740	—	—
1.0312			1-1/32			2-3/4	8	10-1/2	.8740	—	—
1.0625			1-1/16			2-3/4	8	10-1/2	.8740	148.91	—
1.0938			1-3/32			2-7/8	8	11	.8740	—	—
1.1250			1-1/8			2-7/8	8	11	.8740	158.27	—
1.1562			1-5/32			2-7/8	10	11	.9990	—	—
1.1875			1-3/16			2-7/8	10	11	.9990	185.40	—
1.2188			1-7/32			3	10	11-1/2	.9990	—	—
1.2500			1-1/4			3	10	11-1/2	.9990	196.45	—
1.2812			1-9/32			3	10	11-1/2	.9990	—	—
1.3125			1-5/16			3	10	11-1/2	.9990	229.13	—
1.3438			1-11/32			3-1/4	10	12	.9990	—	—
1.3750			1-3/8			3-1/4	10	12	.9990	240.82	—
1.4062			1-13/32			3-1/4	10	12	1.2490	—	—
1.4375			1-7/16			3-1/4	10	12	1.2490	258.27	—
1.4688			1-15/32			3-1/2	10	12-1/2	1.2490	—	—
1.5000			1-1/2			3-1/2	10	12-1/2	1.2490	278.07	—



1433
Straight
Flute



1435
Right Hand
Spiral



18 Cobalt Chucking Reamers | Straight Shank

M-42, 8% COBALT



1433 | Straight Flute



INTERMEDIATE SIZES

LIST PRICE EACH IN QUANTITIES OF:

Size Range	1	2	3-5	6-7	8-11	12-17	18-23	24-35	36-47	48-59	60-71	72-95	96+
0.0100-0.0195	158.87	88.51	65.6	47.10	40.82	34.52	30.32	28.13	26.14	25.11	24.48	23.86	22.86
0.0196-0.0290	152.23	80.45	59.64	42.82	37.10	31.38	27.54	25.66	23.76	23.70	23.65	23.61	23.54
0.0291-0.0390	138.39	73.15	54.24	38.92	33.73	30.14	25.07	23.33	21.60	20.76	20.24	19.88	19.43
0.0391-0.0624	132.65	71.81	52.89	37.42	32.25	27.84	23.57	21.83	20.11	19.26	18.94	18.75	18.44
0.0626-0.1093	126.89	70.44	51.54	35.92	30.75	25.51	22.08	20.34	18.60	17.75	17.62	17.59	17.45
0.1095-0.1249	123.96	67.52	48.63	32.73	27.51	22.35	18.91	17.16	16.84	16.57	16.35	16.12	15.93
0.1251-0.1405	129.58	73.13	54.02	38.92	33.73	28.53	25.07	23.33	21.60	20.76	20.24	19.88	19.43
0.1407-0.1561	128.53	72.06	53.14	37.69	32.50	27.30	23.85	22.11	20.38	19.52	19.26	19.19	19.05
0.1563-0.1718	129.69	73.20	54.31	38.98	33.81	28.63	25.17	23.40	21.69	20.79	20.64	20.48	20.34
0.1720-0.1874	128.76	72.32	53.41	38.00	33.71	27.64	24.17	22.42	20.72	20.64	20.53	20.38	20.37
0.1876-0.2030	134.02	77.56	58.66	43.74	38.57	33.35	29.92	28.17	26.44	25.56	25.07	24.72	24.58
0.2032-0.2187	140.72	81.44	61.59	45.92	40.50	35.02	31.42	29.59	27.77	26.84	26.32	25.96	25.81
0.2189-0.2343	133.46	77.04	58.17	43.20	38.00	32.83	29.35	27.64	27.50	27.24	27.05	26.82	26.41
0.2345-0.2499	131.17	74.86	55.96	40.82	35.61	30.42	26.96	26.78	26.62	26.41	26.18	25.70	25.39
0.2501-0.2968	142.85	86.39	67.48	53.52	48.29	43.13	39.61	37.82	36.19	35.32	35.05	34.55	34.45
0.2970-0.3124	139.24	82.76	63.89	49.50	44.28	39.11	35.66	35.53	35.26	35.07	34.79	34.71	34.51
0.3126-0.3437	144.62	89.88	69.24	55.39	50.22	44.99	41.56	39.84	38.08	37.93	37.71	37.33	37.15
0.3439-0.3593	145.97	88.45	69.54	55.75	50.55	45.37	41.88	40.18	38.51	38.23	37.99	37.93	37.69
0.3595-0.3749	141.58	85.10	66.22	52.06	46.87	41.66	38.22	38.09	37.99	37.85	37.81	37.78	37.65
0.3751-0.3905	154.66	98.19	79.33	66.50	61.28	56.09	52.65	50.90	49.20	48.29	47.75	47.44	46.98
0.3907-0.4218	156.65	100.21	81.30	68.65	63.47	58.27	54.83	53.06	51.35	50.55	49.90	49.59	49.20
0.4220-0.4374	153.57	97.10	78.23	65.28	60.11	54.89	51.42	49.70	47.97	47.12	46.58	46.25	45.81
0.4376-0.4843	161.01	104.58	85.67	73.49	68.32	63.10	59.72	57.92	56.23	55.32	54.83	54.46	54.02
0.4845-0.4999	156.96	100.47	81.60	68.98	63.75	58.60	55.14	53.38	53.28	53.15	52.92	52.84	52.73
0.5001-0.5311	158.93	103.36	85.24	71.26	67.58	63.95	62.02	60.25	59.14	58.02	56.83	55.71	54.59
0.5313-0.5624	160.89	106.21	88.83	73.54	71.40	69.27	68.90	67.11	64.99	62.85	60.73	58.58	56.45
0.5626-0.5937	163.93	108.96	91.07	75.67	73.28	70.99	70.69	68.54	66.17	63.80	61.44	59.07	56.70
0.5939-0.6249	169.11	114.46	97.04	82.39	80.27	78.15	76.94	76.04	73.94	71.82	69.70	67.59	65.46
0.6251-0.6874	174.51	119.62	103.11	89.15	87.22	85.26	84.31	83.34	81.35	79.44	78.30	75.54	73.63
0.6876-0.7187	179.80	124.84	107.24	93.96	92.41	90.74	90.01	89.27	87.72	86.21	84.65	84.18	83.97
0.7189-0.7499	186.16	131.76	115.40	101.95	99.55	97.18	94.92	93.67	92.39	90.00	87.59	85.20	82.80
0.7501-0.8124	195.96	141.13	124.05	107.51	105.22	104.25	102.89	100.62	98.29	95.99	93.68	91.38	89.07
0.8126-0.8437	205.83	151.60	133.66	120.71	118.67	116.66	115.21	113.77	112.68	110.67	108.66	106.66	104.67
0.8439-0.8749	216.55	161.66	144.47	129.07	126.40	124.64	123.75	121.08	118.37	115.71	113.02	110.38	107.73
0.8751-0.9374	225.18	170.09	152.67	137.43	134.72	132.34	132.05	129.33	126.66	123.96	121.25	120.05	118.81
0.9376-0.9687	236.74	180.48	163.26	154.51	151.58	148.48	145.36	143.48	142.28	139.16	136.05	134.54	133.09
0.9689-0.9999	244.96	190.15	173.28	165.04	160.89	156.78	153.91	151.23	148.53	144.43	140.33	136.19	132.08
1.0001-1.0624	263.56	208.70	190.87	183.55	177.17	174.30	171.08	167.96	165.03	160.39	155.75	151.12	146.49
1.0626-1.1249	282.72	227.72	210.28	203.90	198.00	192.09	190.90	186.18	180.26	174.38	168.47	162.57	156.67
1.1251-1.1874	300.61	244.96	229.09	223.30	218.09	212.92	207.99	205.26	202.52	197.34	192.12	186.94	181.73
1.1876-1.2499	319.61	265.81	248.61	243.96	237.63	231.30	227.85	225.02	218.71	212.35	206.06	199.73	193.42
1.2501-1.3749	338.82	287.70	270.83	266.23	261.11	258.02	255.99	253.33	249.82	245.71	241.63	241.37	240.81
1.3751-1.4999	357.65	302.64	289.27	286.55	285.48	283.83	281.26	281.12	280.37	279.81	279.31	278.61	278.07

Sizes above 1.5000 priced upon request.

1435 | Right Hand Spiral**INTERMEDIATE SIZES**

LIST PRICE EACH IN QUANTITIES OF:

Size Range	1	2	3-5	6-7	8-11	12-17	18-23	24-35	36-47	48-59	60-71	72-95	96+
0.0391-0.0624	134.83	74.35	56.60	38.79	33.34	27.94	24.75	23.01	21.50	20.53	20.19	19.73	19.72
0.0626-0.1093	129.93	73.50	54.68	39.29	34.13	28.92	25.48	23.71	21.98	21.13	20.62	20.26	18.61
0.1095-0.1249	129.16	72.74	53.82	38.45	33.23	28.07	24.58	22.87	21.13	20.26	19.77	19.41	18.95
0.1251-0.1405	130.14	73.48	54.46	40.19	34.45	29.64	28.52	25.17	24.56	23.87	23.29	22.82	22.42
0.1407-0.1561	133.18	75.90	55.37	41.92	37.11	32.42	29.28	27.05	25.34	24.37	24.10	23.26	22.43
0.1563-0.1718	134.12	77.64	56.43	43.88	38.69	33.49	30.02	28.28	26.59	25.70	25.18	24.82	24.41
0.1720-0.1874	134.78	78.30	59.40	44.54	39.40	34.20	30.75	28.99	27.25	26.41	25.89	25.51	25.09
0.1876-0.2030	135.94	79.23	60.65	45.83	40.38	35.60	31.83	29.99	28.64	27.51	27.21	26.95	26.82
0.2032-0.2187	136.85	80.47	61.59	46.96	41.86	36.38	33.47	31.07	30.23	28.64	28.07	28.13	27.75
0.2189-0.2343	138.06	81.60	62.70	48.21	43.00	37.79	34.35	32.61	30.89	30.02	29.50	28.99	28.74
0.2345-0.2499	136.54	80.18	61.33	46.66	41.48	36.27	32.83	31.07	29.35	29.28	29.20	29.13	29.04
0.2501-0.2968	144.95	88.85	68.01	54.02	48.81	43.65	40.18	38.45	36.70	36.45	36.25	36.02	35.83
0.2970-0.3124	141.37	89.88	66.07	51.88	46.71	41.51	38.06	36.31	36.22	36.14	36.07	35.91	35.86
0.3126-0.3437	146.22	88.81	71.29	56.60	48.75	44.75	40.49	40.24	39.98	39.53	39.24	38.85	38.63
0.3439-0.3593	147.02	90.56	71.84	58.03	52.84	47.65	44.18	42.47	40.71	39.86	39.37	39.26	39.14
0.3595-0.3749	146.49	90.06	71.16	57.50	52.33	47.12	43.67	41.92	40.22	39.37	39.24	39.10	38.97
0.3751-0.3905	157.09	98.51	80.29	64.42	59.28	54.08	51.32	50.65	50.03	49.83	49.61	49.44	49.29
0.3907-0.4218	161.23	102.35	83.45	71.03	65.81	60.64	57.17	55.44	53.68	52.84	52.33	51.98	51.45
0.4220-0.4374	160.52	101.66	82.76	70.27	65.07	59.89	56.42	54.68	52.97	52.08	51.58	51.22	50.75
0.4376-0.4843	162.95	107.02	86.58	74.47	69.28	64.10	60.64	58.92	57.17	56.99	56.90	56.69	56.42
0.4845-0.4999	161.83	102.94	84.07	71.69	66.50	61.28	57.87	57.63	57.42	57.17	56.83	56.56	56.47
0.5001-0.5311	177.16	124.54	104.05	89.46	84.49	79.42	75.47	73.04	70.63	68.20	65.71	63.26	60.92
0.5313-0.5624	185.55	141.27	119.96	103.69	99.16	94.41	90.13	85.58	81.05	76.54	72.01	67.50	62.97
0.5626-0.5937	178.94	147.91	125.99	106.70	101.86	97.00	92.17	87.30	82.46	77.62	72.77	67.90	63.07
0.5939-0.6249	188.64	148.11	126.24	112.10	107.68	103.27	98.85	94.41	90.00	85.57	81.17	76.73	72.32
0.6251-0.6874	194.43	153.44	134.24	117.73	113.63	109.55	105.45	101.37	97.27	93.19	89.07	84.96	80.87
0.6876-0.7187	202.66	160.11	140.27	126.66	122.56	118.46	114.36	110.27	106.18	102.09	97.99	93.87	89.78
0.7189-0.7499	205.13	163.98	144.45	127.13	123.05	118.96	114.88	110.76	106.66	102.58	98.47	94.38	90.30
0.7501-0.8124	212.20	169.91	149.44	134.97	130.79	126.28	122.37	118.18	113.98	109.76	105.56	101.37	97.17
0.8126-0.8437	218.06	176.55	156.32	153.03	148.62	144.31	140.05	135.75	131.46	127.15	122.88	118.58	114.29
0.8439-0.8749	224.76	179.12	157.64	155.03	150.73	146.50	142.27	138.00	133.77	129.51	125.25	121.00	116.79
0.8751-0.9374	249.64	186.73	166.14	163.58	159.29	155.05	150.84	146.60	142.38	138.17	133.93	129.72	125.48
0.9376-0.9687	258.28	194.76	173.93	171.19	167.63	164.07	160.55	157.00	153.48	149.95	146.41	142.95	139.35
0.9689-0.9999	260.42	197.30	176.14	173.18	169.49	165.90	162.30	158.68	155.09	151.48	147.91	144.29	140.69

Sizes above 1.0000 priced upon request.



30 Production Length Reamers | Straight Shank

HIGH SPEED STEEL



333
Straight
Flute



335
Right Hand
Spiral

Decimal	Wire	Letter	Fraction	Over/ Under	Metric	Flute Length	# of Flutes	Overall Length	Shank Diameter	333 List Price	335 List Price
0.0394					1.0mm	1/2	4	1-5/8	.0394	13.87	16.01
0.0400	#60					1/2	4	1-5/8	.0400	15.24	17.22
0.0410	#59					1/2	4	1-5/8	.0410	15.24	17.22
0.0420	#58					1/2	4	1-5/8	.0420	15.24	17.22
0.0430	#57					1/2	4	1-3/4	.0430	15.24	17.22
0.0465	#56					1/2	4	1-3/4	.0465	15.24	17.22
0.0469			3/64			1/2	4	1-3/4	.0469	15.24	17.22
0.0520	#55					1/2	4	1-7/8	.0520	15.24	17.22
0.0550	#54					1/2	4	1-7/8	.0550	15.24	17.22
0.0591					1.5mm	1/2	4	1-7/8	.0591	15.24	17.22
0.0595	#53					1/2	4	1-7/8	.0595	15.24	17.22
0.0625			1/16			1/2	4	1-7/8	.0625	14.32	17.22
0.0635	#52					1/2	4	1-7/8	.0635	14.32	17.22
0.0670	#51					3/4	4	2	.0670	12.77	14.04
0.0700	#50					3/4	4	2	.0700	12.77	14.04
0.0730	#49					3/4	4	2	.0730	12.77	14.04
0.0760	#48					3/4	4	2	.0760	12.77	14.04
0.0781			5/64			3/4	4	2	.0781	12.77	14.04
0.0785	#47					3/4	4	2	.0785	12.77	14.04
0.0787					2.0mm	3/4	4	2-1/8	.0787	12.77	14.04
0.0810	#46					3/4	4	2-1/8	.0810	12.77	14.04
0.0820	#45					3/4	4	2-1/8	.0820	12.77	14.04
0.0860	#44					3/4	4	2-1/8	.0860	12.77	14.04
0.0890	#43					3/4	4	2-1/4	.0890	12.45	14.04
0.0935	#42					3/4	4	2-1/4	.0935	12.45	14.04
0.0938			3/32			3/4	4	2-1/4	.0938	12.45	14.04
0.0960	#41					7/8	4	2-3/8	.0960	12.45	14.04
0.0980	#40					7/8	4	2-3/8	.0980	12.45	14.04
0.0984					2.5mm	7/8	4	2-3/8	.0984	12.45	14.04
0.0995	#39					7/8	4	2-3/8	.0995	12.45	14.04
0.1015	#38					7/8	4	2-1/2	.1015	12.45	14.04
0.1040	#37					7/8	4	2-1/2	.1040	12.45	14.04
0.1065	#36					7/8	4	2-1/2	.1065	12.45	14.04
0.1094			7/64			7/8	4	2-5/8	.1094	12.77	14.04
0.1100	#35					7/8	4	2-5/8	.1100	12.77	14.04
0.1110	#34					7/8	4	2-5/8	.1110	12.77	14.04
0.1130	#33					7/8	4	2-5/8	.1130	12.77	14.04
0.1160	#32					7/8	4	2-3/4	.1160	12.77	14.04
0.1181					3.0mm	7/8	4	2-3/4	.1181	12.77	14.04
0.1200	#31					7/8	4	2-3/4	.1200	12.77	14.04
0.1240				o/u		7/8	4	2-3/4	.1240	12.77	14.04
0.1250			1/8			7/8	4	2-3/4	.1250	10.08	13.25
0.1260				o/u		7/8	4	2-3/4	.1260	12.73	14.04
0.1285	#30					7/8	4	2-3/4	.1285	12.73	14.04
0.1360	#29					1	4	2-7/8	.1360	16.79	17.60
0.1378					3.5mm	1	4	2-7/8	.1378	16.79	17.60
0.1405	#28					1	4	2-7/8	.1405	16.79	17.60
0.1406			9/64			1	4	2-7/8	.1406	16.79	17.60
0.1440	#27					1	4	3	.1440	16.79	17.60
0.1470	#26					1	4	3	.1470	16.79	17.60
0.1495	#25					1	4	3	.1495	16.79	17.60
0.1520	#24					1	4	3-1/8	.1520	16.79	17.60

Decimal	Wire	Letter	Fraction	Over/ Under	Metric	Flute Length	# of Flutes	Overall Length	Shank Diameter	333 List Price	335 List Price
0.1540	#23					1	4	3-1/8	.1540	16.79	17.60
0.1562			5/32			1	4	3-1/8	.1562	16.79	17.60
0.1570	#22					1	4	3-1/8	.1570	15.04	17.60
0.1575					4.0mm	1	6	3-1/8	.1575	15.04	17.60
0.1590	#21					1-1/8	6	3-1/4	.1590	16.68	17.60
0.1610	#20					1-1/8	6	3-1/4	.1610	16.68	17.60
0.1660	#19					1-1/8	6	3-1/4	.1660	16.68	17.60
0.1695	#18					1-1/8	6	3-1/4	.1695	16.68	17.60
0.1719			11/64			1-1/8	6	3-1/4	.1719	16.68	17.60
0.1730	#17					1-1/8	6	3-3/8	.1730	16.68	17.60
0.1770	#16					1-1/8	6	3-3/8	.1770	16.68	17.60
0.1772					4.5mm	1-1/8	6	3-3/8	.1772	16.68	17.60
0.1800	#15					1-1/8	6	3-3/8	.1800	17.60	18.69
0.1820	#14					1-1/8	6	3-3/8	.1820	17.60	18.69
0.1850	#13					1-1/8	6	3-1/2	.1850	17.60	18.69
0.1865				o/u		1-1/8	6	3-1/2	.1865	17.60	18.69
0.1875			3/16			1-1/8	6	3-1/2	.1875	14.04	17.60
0.1885				o/u		1-1/8	6	3-1/2	.1885	17.60	18.69
0.1890	#12					1-1/8	6	3-1/2	.1890	16.52	17.60
0.1910	#11					1-1/4	6	3-1/2	.1910	18.69	20.60
0.1935	#10					1-1/4	6	3-5/8	.1935	18.69	20.60
0.1960	#9					1-1/4	6	3-5/8	.1960	18.69	20.60
0.1969					5.0mm	1-1/4	6	3-5/8	.1969	18.69	20.60
0.1990	#8					1-1/4	6	3-5/8	.1990	18.69	20.60
0.2010	#7					1-1/4	6	3-5/8	.2010	18.69	20.60
0.2031			13/64			1-1/4	6	3-5/8	.2031	18.69	20.32
0.2040	#6					1-1/4	6	3-3/4	.2040	18.69	20.60
0.2055	#5					1-1/4	6	3-3/4	.2055	18.69	20.60
0.2090	#4					1-1/4	6	3-3/4	.2090	18.69	20.60
0.2130	#3					1-1/4	6	3-3/4	.2130	18.69	20.60
0.2165					5.5mm	1-1/4	6	3-3/4	.2165	18.69	20.60
0.2188			7/32			1-1/4	6	3-3/4	.2188	18.37	19.73
0.2210	#2					1-1/2	6	3-7/8	.2210	18.37	20.60
0.2280	#1					1-1/2	6	3-7/8	.2280	18.37	20.60
0.2340		A				1-1/2	6	3-7/8	.2340	18.37	20.60
0.2344			15/64			1-1/2	6	3-7/8	.2344	18.37	20.60
0.2362					6.0mm	1-1/2	6	3-7/8	.2362	18.37	20.60
0.2380		B				1-1/2	6	4	.2380	19.92	20.60
0.2420		C				1-1/2	6	4	.2420	19.92	20.60
0.2460		D				1-1/2	6	4	.2460	19.92	20.60
0.2490				o/u		1-1/2	6	4	.2490	18.37	20.60
0.2500		E	1/4			1-1/2	6	4	.2500	16.52	18.95
0.2510				o/u		1-1/2	6	4-1/8	.2510	17.95	20.60
0.2559					6.5mm	1-1/2	6	4-1/8	.2559	19.86	20.60
0.2570		F				1-1/2	6	4-1/8	.2570	19.86	20.60
0.2610		G				1-1/2	6	4-1/8	.2610	19.86	22.43
0.2656			17/64			1-1/2	6	4-1/8	.2656	19.86	22.43
0.2660		H				1-1/2	6	4-1/8	.2660	22.17	23.01
0.2720		I				1-1/2	6	4-1/8	.2720	22.17	23.01
0.2756					7.0mm	1-1/2	6	4-1/8	.2756	22.17	23.01
0.2770		J				1-1/2	6	4-1/8	.2770	22.17	23.01
0.2810		K				1-1/2	6	4-1/4	.2810	22.17	23.01



333
Straight
Flute



335
Right Hand
Spiral



22 Production Length Reamers | Straight Shank

HIGH SPEED STEEL



333
Straight
Flute



335
Right Hand
Spiral

Decimal	Wire Letter	Fraction	Over/Under	Metric	Flute Length	# of Flutes	Overall Length	Shank Diameter	333 List Price	335 List Price
0.2812		9/32			1-1/2	6	4-1/4	.2812	22.17	22.43
0.2900	L				1-1/2	6	4-1/4	.2900	22.17	23.01
0.2950	M				1-1/2	6	4-3/8	.2950	22.17	23.01
0.2953				7.5mm	1-1/2	6	4-3/8	.2953	22.17	23.01
0.2969		19/64			1-1/2	6	4-3/8	.2969	22.17	23.01
0.3020	N				1-1/2	6	4-3/8	.3020	22.17	23.01
0.3115			o/u		1-1/2	6	4-1/2	.3115	21.10	23.01
0.3125		5/16			1-1/2	6	4-1/2	.3125	19.73	21.10
0.3135			o/u		1-1/2	6	4-1/2	.3135	21.10	23.01
0.3150				8.0mm	1-1/2	6	4-1/2	.3150	23.54	25.42
0.3160	O				1-1/2	6	4-1/2	.3160	23.54	25.42
0.3230	P				1-1/2	6	4-5/8	.3230	23.54	25.42
0.3281		21/64			1-1/2	6	4-5/8	.3281	23.54	25.42
0.3320	Q				1-1/2	6	4-3/4	.3320	23.54	25.42
0.3346				8.5mm	1-1/2	6	4-3/4	.3346	23.54	25.42
0.3390	R				1-1/2	6	4-3/4	.3390	23.54	25.42
0.3438		11/32			1-1/2	6	4-3/4	.3438	23.54	25.42
0.3480	S				1-3/4	6	4-7/8	.3480	23.54	25.42
0.3543				9.0mm	1-3/4	6	4-7/8	.3543	23.54	25.42
0.3580	T				1-3/4	6	4-7/8	.3580	23.54	25.42
0.3594		23/64			1-3/4	6	4-7/8	.3594	23.54	25.42
0.3680	U				1-3/4	6	5	.3680	23.54	25.42
0.3740			o/u	9.5mm	1-3/4	6	5	.3740	22.43	25.42
0.3750		3/8			1-3/4	6	5	.3750	21.10	24.15
0.3760			o/u		1-3/4	6	5	.3760	22.43	25.16
0.3770	V				1-3/4	6	5	.3770	25.92	28.42
0.3860	W				1-3/4	6	5-1/8	.3860	25.92	28.42
0.3906		25/64			1-3/4	6	5-1/8	.3906	25.92	28.42
0.3937				10.0mm	1-3/4	6	5-1/8	.3937	25.92	28.42
0.3970	X				1-3/4	6	5-1/8	.3970	25.92	28.42
0.4040	Y				1-3/4	6	5-1/4	.4040	27.05	28.42
0.4062		13/32			1-3/4	6	5-1/4	.4062	27.05	28.13
0.4130	Z				1-3/4	6	5-1/4	.4130	27.05	28.42
0.4134				10.5mm	1-3/4	6	5-1/4	.4134	27.05	28.42
0.4219		27/64			1-3/4	6	5-3/8	.4219	27.05	28.42
0.4331				11.0mm	1-3/4	6	5-1/2	.4331	25.97	28.42
0.4365			o/u		1-3/4	6	5-1/2	.4365	25.97	28.42
0.4375		7/16			1-3/4	6	5-1/2	.4375	25.42	28.13
0.4385			o/u		1-3/4	6	5-1/2	.4385	25.97	28.42
0.4528				11.5mm	1-3/4	6	5-1/2	.4528	29.76	31.94
0.4531		29/64			1-3/4	6	5-5/8	.4531	29.76	31.94
0.4688		15/32			1-3/4	6	5-3/4	.4688	29.76	31.94
0.4724				12.0mm	2	6	5-7/8	.4724	29.76	31.94
0.4844		31/64			2	6	5-7/8	.4844	29.76	31.94
0.4921				12.5mm	2	6	5-7/8	.4921	28.42	31.94
0.4990			o/u		2	6	6	.4990	28.42	31.94
0.5000		1/2			2	6	6	.5000	27.05	31.38
0.5010			o/u		2	6	6	.5010	28.42	31.94

333 | Straight Flute



INTERMEDIATE SIZES

LIST PRICE EACH IN QUANTITIES OF:

Size Range	1	2	3-5	6-7	8-11	12-17	18-23	24-35	36-47	48-59	60-71	72-95	96+
.0400 - .0624	103.90	67.08	50.70	31.22	28.16	25.16	22.11	20.38	18.64	17.79	17.28	16.96	16.41
.0626 - .1093	102.38	65.41	49.13	29.59	26.65	23.61	20.60	18.84	18.65	18.30	17.71	17.13	16.26
.1095 - .1249	97.78	62.71	46.27	26.82	23.76	20.76	17.71	16.01	14.25	13.40	12.90	12.81	12.77
.1251 - .1874	103.76	67.02	50.33	30.84	27.80	24.81	21.98	20.26	18.51	17.69	17.16	16.82	16.79
.1876 - .2343	108.27	71.50	55.02	35.59	32.55	29.50	26.46	24.74	23.04	22.15	21.65	21.29	20.83
.2345 - .2499	106.15	69.37	52.92	33.46	30.42	27.40	24.34	22.62	20.92	20.05	19.98	19.96	19.92
.2501 - .2969	112.35	75.53	59.10	39.61	36.60	33.56	30.54	28.80	27.08	26.19	25.66	25.31	24.88
.2970 - .3124	109.44	72.62	56.16	36.70	33.71	30.66	27.64	25.90	24.17	23.29	22.79	22.42	22.17
.3126 - .3593	113.90	77.13	60.67	41.17	38.16	35.14	32.10	30.40	28.64	27.79	27.25	26.92	26.46
.3595 - .3749	111.25	74.44	57.99	38.51	35.49	32.44	29.43	27.71	25.97	25.11	24.58	24.20	23.82
.3751 - .4218	117.42	80.66	64.21	44.75	41.74	38.69	35.66	33.92	32.21	31.30	30.81	30.44	30.02
.4220 - .4374	115.40	78.60	62.17	42.67	39.64	36.63	33.34	31.90	30.13	29.26	28.74	28.42	27.95
.4376 - .4843	120.31	83.52	67.06	47.62	44.54	41.56	38.51	36.80	35.05	34.20	33.71	33.34	32.87
.4845 - .4999	117.63	80.86	64.40	44.94	42.41	38.87	35.82	34.07	32.38	31.52	30.99	30.66	30.24

335 | Right Hand Spiral



INTERMEDIATE SIZES

LIST PRICE EACH IN QUANTITIES OF:

Size Range	1	2	3-5	6-7	8-11	12-17	18-23	24-35	36-47	48-59	60-71	72-95	96+
.0400 - .0624	107.39	70.63	54.16	34.71	31.69	28.64	25.64	23.87	21.13	21.29	20.77	20.39	18.77
.0626 - .1093	103.70	66.91	50.49	30.99	27.95	25.92	20.66	20.19	18.43	17.60	17.02	16.71	16.30
.1095 - .1249	102.89	66.15	49.74	30.25	27.22	24.18	21.16	19.43	17.71	16.83	16.31	16.01	15.55
.1251 - .1874	106.20	70.63	54.16	34.71	31.66	28.53	25.64	23.84	23.25	22.31	21.86	21.55	21.14
.1876 - .2343	110.26	73.49	57.04	37.58	34.56	31.52	28.47	26.63	25.01	24.17	23.66	23.29	22.87
.2345 - .2499	109.03	72.22	55.80	36.17	33.28	30.25	27.22	25.56	23.66	22.89	22.37	22.06	21.60
.2501 - .2969	112.57	75.79	59.37	39.91	36.87	33.84	30.81	29.07	27.35	26.46	25.97	25.64	25.20
.2970 - .3124	111.15	74.36	57.92	38.45	35.40	32.38	29.35	27.64	25.90	25.01	24.49	24.17	23.71
.3126 - .3593	115.53	78.70	62.30	42.82	39.79	36.77	33.72	32.00	30.25	29.40	28.90	28.53	28.12
.3595 - .3749	115.16	78.38	61.94	42.47	39.42	36.38	33.35	31.66	29.92	29.05	28.53	28.16	27.75
.3751 - .4218	118.70	82.09	65.62	46.19	43.19	40.15	37.11	35.34	33.54	32.76	32.26	31.82	31.50
.4220 - .4374	118.46	81.22	65.22	45.76	42.73	39.72	36.65	34.94	33.20	32.36	31.83	31.50	31.04
.4376 - .4843	120.93	84.11	67.67	48.21	45.18	42.15	39.11	37.36	35.66	34.79	34.27	33.92	33.49
.4845 - .4999	119.28	82.46	66.01	46.56	43.53	40.47	37.49	35.73	33.99	33.14	32.58	32.26	31.96



24 Jobber Reamers - Taper Shank

HIGH SPEED STEEL



DIAMETER	FRACTION	FLUTE LENGTH	NUMBER FLUTES	OVERALL LENGTH	MORSE TAPER	406 LIST PRICE
0.2500	1/4	2	6	5-3/16	1	61.94
0.2812	9/32	2	6	5-3/16	1	63.76
0.3125	5/16	2-1/4	6	5-1/2	1	64.18
0.3438	11/32	2-1/4	6	5-1/2	1	68.68
0.3750	3/8	2-1/2	6	5-13/16	1	72.36
0.4062	13/32	2-1/2	6	5-13/16	1	74.86
0.4375	7/16	2-3/4	6	6-1/8	1	77.56
0.4688	15/32	2-3/4	6	6-1/8	1	80.45
0.5000	1/2	3	6	6-7/16	1	84.02
0.5312	17/32	3	6	6-7/16	1	88.57
0.5625	9/16	3-1/4	8	6-3/4	1	93.29
0.5938	19/32	3-1/4	8	6-3/4	1	95.72
0.6250	5/8	3-1/2	8	7-9/16	2	97.36
0.6562	21/32	3-1/2	8	7-9/16	2	102.02
0.6875	11/16	3-7/8	8	8	2	108.67
0.7188	23/32	3-7/8	8	8	2	110.70
0.7500	3/4	4-3/16	8	8-3/8	2	113.57
0.8125	13/16	4-9/16	8	8-13/16	2	127.47
0.8750	7/8	4-7/8	8	9-3/16	2	142.50
0.9375	15/16	5-1/8	8	10	3	156.53
1.0000	1	5-7/16	8	10-3/8	3	171.72

406
Taper
Shank



Made in the USA 

DIAMETER	FRACTION	NUMBER FLUTES	FLUTE LENGTH	OVERALL LENGTH	SHANK DIAMETER	MORSE TAPER	431 LIST PRICE	432 LIST PRICE
0.3750	3/8	6	3/4	7	5/16	1	90.47	102.67
0.4062	13/32	6	3/4	7	5/16	1	96.40	108.70
0.4375	7/16	6	7/8	7	3/8	1	96.40	108.70
0.4688	15/32	6	7/8	7	3/8	1	100.09	111.29
0.5000	1/2	6	1	8	7/16	1	101.86	113.48
0.5312	17/32	6	1	8	7/16	1	106.18	117.98
0.5625	9/16	6	1-1/8	8	7/16	1	106.95	115.87
0.5938	19/32	6	1-1/8	8	7/16	1	108.57	120.11
0.6250	5/8	6	1-1/4	9	9/16	2	111.87	124.41
0.6562	21/32	6	1-1/4	9	9/16	2	116.34	127.84
0.6875	11/16	6	1-1/4	9	9/16	2	117.14	128.61
0.7188	23/32	6	1-1/4	9	9/16	2	124.75	137.17
0.7500	3/4	6	1-3/8	9-1/2	5/8	2	129.05	141.46
0.7812	25/32	8	1-3/8	9-1/2	5/8	2	136.62	147.93
0.8125	13/16	8	1-3/8	9-1/2	5/8	2	141.87	150.13
0.8438	27/32	8	1-3/8	9-1/2	5/8	2	149.47	158.91
0.8750	7/8	8	1-1/2	10	3/4	2	153.73	165.14
0.9062	29/32	8	1-1/2	10	3/4	2	160.29	173.74
0.9375	15/16	8	1-1/2	10	3/4	3	167.78	178.08
0.9688	31/32	8	1-1/2	10	3/4	3	175.35	185.58
1.0000	1	8	1-5/8	10-1/2	7/8	3	184.97	196.25
1.0312	1-1/32	8	1-5/8	10-1/2	7/8	3	195.81	203.80
1.0625	1-1/16	8	1-5/8	10-1/2	7/8	3	204.44	213.54
1.0938	1-3/32	8	1-5/8	10-1/2	7/8	3	214.17	223.05
1.1250	1-1/8	8	1-3/4	11	7/8	3	223.73	230.75
1.1562	1-5/32	8	1-3/4	11	7/8	3	226.74	240.27
1.1875	1-3/16	8	1-3/4	11	1	3	235.62	249.89
1.2188	1-7/32	8	1-3/4	11	1	3	244.18	259.48
1.2500	1-1/4	8	1-7/8	11-1/2	1	4	253.94	271.50
1.3125	1-5/16	8	1-7/8	11-1/2	1	4	262.45	282.13
1.3750	1-3/8	8	2	12	1	4	272.11	293.80
1.4375	1-7/16	8	2	12	1-1/4	4	282.87	311.05
1.5000	1-1/2	8	2-1/8	12-1/2	1-1/4	4	294.79	321.72



431
Straight
Shank



432
Taper
Shank





26 Dowel Pin Reamers | Straight Shank

HIGH SPEED STEEL

470 | Straight Flute



475 | Right Hand Spiral



475L | Left Hand Spiral



DIAMETER	FLUTE LENGTH	NUMBER FLUTES	OVERALL LENGTH	SHANK DIAMETER	470 LIST PRICE	475 LIST PRICE	475L LIST PRICE
.1230	1-7/8	4	3-1/2	.1190	14.92	17.10	17.10
.1247	1-7/8	4	3-1/2	.1190	14.92	17.10	17.10
.1855	1-1/8	6	4-1/2	.1805	19.01	21.85	21.85
.1870	1-1/8	6	4-1/2	.1805	19.01	21.85	21.85
.2480	1-1/2	6	6	.2405	20.76	22.83	22.83
.2495	1-1/2	6	6	.2405	20.76	22.83	22.83
.3105	1-1/2	6	6	.2792	24.42	26.86	26.86
.3120	1-1/2	6	6	.2792	24.42	26.86	26.86
.3730	1-3/4	6	7	.3105	26.33	28.98	28.98
.3745	1-3/4	6	7	.3105	26.33	28.98	28.98
.4355	1-3/4	6	7	.3730	29.74	34.45	34.45
.4370	1-3/4	6	7	.3730	29.74	34.45	34.45
.4980	2	6	8	.4355	32.38	37.50	37.50
.4995	2	6	8	.4355	32.38	37.50	37.50

Dowel Pin Reamers | Straight Shank

M-42, 8% COBALT

1470 | Straight Flute



1475 | Right Hand Spiral



DIAMETER	FLUTE LENGTH	NUMBER FLUTES	OVERALL LENGTH	SHANK DIAMETER	1470 LIST PRICE	1475 LIST PRICE
.1230	1-7/8	4	3-1/2	.1190	15.43	17.86
.1247	1-7/8	4	3-1/2	.1190	15.43	17.86
.1855	1-1/8	6	4-1/2	.1805	19.40	22.94
.1870	1-1/8	6	4-1/2	.1805	19.40	22.94
.2480	1-1/2	6	6	.2405	21.79	24.87
.2495	1-1/2	6	6	.2405	21.79	24.87
.3105	1-1/2	6	6	.2792	31.18	32.29
.3120	1-1/2	6	6	.2792	31.18	32.29
.3730	1-3/4	6	7	.3105	34.13	35.40
.3745	1-3/4	6	7	.3105	34.13	35.40
.4355	1-3/4	6	7	.3730	43.80	46.95
.4370	1-3/4	6	7	.3730	43.80	46.95
.4980	2	6	8	.4355	50.24	53.81
.4995	2	6	8	.4355	50.24	53.81

Made in the USA 

370 | Straight Flute**375** | Right Hand Spiral

DIAMETER	FLUTE LENGTH	NUMBER FLUTES	OVERALL LENGTH	SHANK DIAMETER	370 LIST PRICE	375 LIST PRICE
.1230	1-7/8	4	2-3/4	.1230	12.77	15.55
.1247	1-7/8	4	2-3/4	.1247	12.77	15.55
.1855	1-1/8	6	3-1/2	.1855	16.79	21.14
.1870	1-1/8	6	3-1/2	.1870	16.79	21.14
.2480	1-1/2	6	4	.2480	19.92	21.60
.2495	1-1/2	6	4	.2495	19.92	21.60
.3105	1-1/2	6	4-1/2	.3105	22.17	23.71
.3120	1-1/2	6	4-1/2	.3120	22.17	23.71
.3730	1-3/4	6	5	.3730	23.82	27.75
.3745	1-3/4	6	5	.3745	23.82	27.75
.4355	1-3/4	6	5-1/2	.4355	27.95	31.04
.4370	1-3/4	6	5-1/2	.4370	27.95	31.04
.4980	2	6	6	.4980	30.24	33.57
.4995	2	6	6	.4995	31.96	35.48

Dowel Pin Reamers vs. Standard Chucking Reamers

What's the difference?

Few people know the difference between Dowel Pin Reamers and Standard Chucking Reamers. Whereas Standard Chucking Reamers are produced with little back taper and a plus diameter tolerance, Dowel Pin Reamers are produced with increased back taper and a minus diameter tolerance (-.0002).

A) To gain maximum results in dowel pin installations, the following is recommended.

1. Drill holes 1/64" under dowel pin size either in cast iron or steel when below 1/2" diameter. For holes 1/2" and over in size, the drill hole may be 1/32" under the dowel pin size.
2. Ream holes in cast iron .0005" undersize. For example, the 1/4" dowel, uses a .2495" reamer to obtain a press fit. For tool steel which is to be hardened, use a standard size reamer. The shrinkage in hardening will take care of a press fit. Scale should be removed by polishing or lapping.

B) How to dowel very high grade tools or dies.

1. Drill holes in part 1/64" undersize when below 1/2" diameter. For holes 1/2" and over in size, the drill hole may be 1/32" under dowel size.
2. Ream holes .002" undersize.
3. Ream holes .0005" undersize.
(NOTE: Tolerance of reamer is plus .000 minus .0002" with .0005 back taper per 1-1/2" length. Grind for end cutting with no relief on periphery.)
4. Harden tool steel and lap holes to fit reamer.
5. Align and secure tool steel in place on its mounting block or base. Use lapped holes as a jig and follow same drill and reamer sequence as above in Steps 1, 2, and 3.



HIGH SPEED STEEL

436 | Straight Flute



437 | Right Hand Spiral



DIAMETER	EQUIVALENT	FLUTE LENGTH	NUMBER FLUTES	OVERALL LENGTH	MORSE TAPER	436 LIST PRICE	437 LIST PRICE
0.2362	6mm	1-1/2	6	6	1	34.94	—
0.2500	1/4	1-1/2	6	6	1	34.94	38.42
0.2812	9/32	1-1/2	6	6	1	36.60	40.23
0.3125	5/16	1-1/2	6	6	1	35.98	39.57
0.3150	8mm	1-1/2	6	6	1	37.55	—
0.3438	11/32	1-1/2	6	6	1	38.98	42.87
0.3750	3/8	1-3/4	6	7	1	40.19	44.23
0.3937	10mm	1-3/4	6	7	1	40.61	—
0.4062	13/32	1-3/4	6	7	1	40.90	44.98
0.4375	7/16	1-3/4	6	7	1	41.11	45.21
0.4688	15/32	1-3/4	6	7	1	44.39	48.81
0.4724	12mm	2	6	8	1	44.67	—
0.5000	1/2	2	6	8	1	45.03	49.54
0.5312	17/32	2	6	8	1	50.14	55.15
0.5625	9/16	2	8	8	1	52.48	57.74
0.5938	19/32	2	8	8	1	53.44	58.78
0.6250	5/8	2-1/4	8	9	2	56.90	62.58
0.6562	21/32	2-1/4	8	9	2	57.42	63.17
0.6875	11/16	2-1/4	8	9	2	57.42	63.17
0.7188	23/32	2-1/4	8	9	2	64.77	71.26
0.7500	3/4	2-1/2	8	9-1/2	2	64.77	71.26
0.7812	25/32	2-1/2	8	9-1/2	2	74.05	81.45
0.8125	13/16	2-1/2	8	9-1/2	2	74.05	81.45
0.8438	27/32	2-1/2	8	9-1/2	2	82.67	90.93
0.8750	7/8	2-5/8	8	10	2	83.56	91.89
0.9062	29/32	2-5/8	8	10	2	91.98	101.14
0.9375	15/16	2-5/8	8	10	3	91.98	101.14
0.9688	31/32	2-5/8	8	10	3	100.91	111.00
1.0000	1	2-3/4	8	10-1/2	3	101.78	111.99
1.0625	1-1/16	2-3/4	8	10-1/2	3	111.29	122.41
1.1250	1-1/8	2-7/8	8	11	3	123.51	135.83
1.1875	1-3/16	2-7/8	10	11	3	138.39	152.23
1.2500	1-1/4	3	10	11-1/2	4	149.84	164.84
1.3125	1-5/16	3	10	11-1/2	4	163.87	180.25
1.3750	1-3/8	3-1/4	10	12	4	177.12	194.81
1.4375	1-7/16	3-1/4	10	12	4	191.97	211.16
1.5000	1-1/2	3-1/2	10	12-1/2	4	204.03	224.42
1.5625	1-9/16	3-1/2	12	13	4	286.44	315.07
1.6250	1-5/8	3-1/2	12	13	4	286.44	315.07
1.6875	1-11/16	4	12	13-1/2	5	328.96	361.86
1.7500	1-3/4	4	12	13-1/2	5	328.96	361.86
1.8125	1-13/16	4	12	14	5	378.87	416.74
1.8750	1-7/8	4	12	14	5	378.87	416.74
1.9375	1-15/16	4	12	14	5	443.54	487.89
2.0000	2	4	12	14	5	443.54	487.89



30 Hand Reamers | Straight Shank

HIGH SPEED STEEL

400 | Straight Flute



403 | Left Hand Spiral



DIAMETER	FRACTION	FLUTE LENGTH	NUMBER FLUTES	OVERALL LENGTH	SHANK DIAMETER	400 LIST PRICE	403 LIST PRICE
0.0625	1/16	1	4	2	.0625	42.21	49.54
0.0781	5/64	1	4	2	.0781	42.21	49.54
0.0938	3/32	1-1/4	4	2-1/2	.0938	42.21	49.54
0.1094	7/64	1-1/4	4	2-1/2	.1094	42.21	49.54
0.1250	1/8	1-1/2	4	3	.1250	39.80	48.92
0.1406	9/64	1-5/8	4	3-1/4	.1406	39.80	48.92
0.1562	5/32	1-5/8	4	3-1/4	.1562	43.02	52.79
0.1719	11/64	1-3/4	6	3-1/2	.1719	43.02	52.79
0.1875	3/16	1-3/4	6	3-1/2	.1875	42.21	52.79
0.2031	13/64	1-7/8	6	3-3/4	.2031	42.21	52.79
0.2188	7/32	1-7/8	6	3-3/4	.2188	46.55	51.40
0.2344	15/64	2	6	4	.2344	46.55	51.40
0.2500	1/4	2	6	4	.2500	46.25	51.16
0.2656	17/64	2-1/8	6	4-1/4	.2656	46.55	51.40
0.2812	9/32	2-1/8	6	4-1/4	.2812	50.07	56.81
0.2969	19/64	2-1/4	6	4-1/2	.2969	50.07	56.81
0.3125	5/16	2-1/4	6	4-1/2	.3125	48.92	56.29
0.3438	11/32	2-3/8	6	4-3/4	.3438	56.81	63.28
0.3750	3/8	2-1/2	6	5	.3750	55.48	63.08
0.4062	13/32	2-5/8	6	5-1/4	.4062	64.38	70.10
0.4375	7/16	2-3/4	6	5-1/2	.4375	63.03	70.34
0.4688	15/32	2-7/8	6	5-3/4	.4688	69.79	77.65
0.5000	1/2	3	6	6	.5000	67.07	75.75
0.5312	17/32	3-1/8	6	6-1/4	.5312	72.45	88.44
0.5625	9/16	3-1/4	8	6-1/2	.5625	76.14	87.32
0.5938	19/32	3-3/8	8	6-3/4	.5938	84.62	95.02
0.6250	5/8	3-1/2	8	7	.6250	82.04	93.26
0.6562	21/32	3-11/16	8	7-3/8	.6562	91.92	102.25
0.6875	11/16	3-7/8	8	7-3/4	.6875	90.14	101.95
0.7188	23/32	4-1/16	8	8-1/8	.7188	98.73	109.93
0.7500	3/4	4-3/16	8	8-3/8	.7500	96.13	107.85
0.7812	25/32	4-3/8	8	8-3/4	.7812	105.45	117.18
0.8125	13/16	4-9/16	8	9-1/8	.8125	110.71	117.18
0.8438	27/32	4-11/16	8	9-3/8	.8438	115.45	128.25
0.8750	7/8	4-7/8	8	9-3/4	.8750	116.46	128.25
0.9062	29/32	5	8	10	.9062	128.68	142.97
0.9375	15/16	5-1/8	8	10-1/4	.9375	116.54	142.97
0.9688	31/32	5-5/16	8	10-5/8	.9688	141.66	157.41
1.0000	1	5-7/16	8	10-7/8	1.0000	141.04	157.41
1.1250	1-1/8	5-13/16	8	11-5/8	1.1250	184.34	202.63
1.2500	1-1/4	6-1/8	10	12-1/4	1.2500	226.35	249.33
1.3750	1-3/8	6-5/16	10	12-5/8	1.3750	267.54	294.22
1.5000	1-1/2	6-1/2	10	13	1.5000	315.79	348.45

400 | Straight Flute

INTERMEDIATE SIZES

Size Range	LIST PRICE EACH IN QUANTITIES OF:												
	1	2	3-5	6-7	8-11	12-17	18-23	24-35	36-47	48-59	60-71	72-95	96+
.0626 - .1093	135.76	101.29	80.28	59.30	54.12	53.70	45.37	43.65	43.34	43.13	42.87	42.65	42.46
.1095 - .1405	132.74	99.06	78.06	51.86	47.14	46.58	43.14	41.27	41.37	41.05	40.71	40.42	40.10
.1407 - .1718	136.78	102.08	81.05	60.05	54.84	49.58	46.13	44.39	44.20	43.98	43.85	43.58	43.31
.1720 - .2030	134.42	101.29	80.28	59.30	54.11	48.81	45.37	43.65	43.34	43.13	42.87	42.65	42.46
.2032 - .2655	141.05	105.26	84.24	63.24	58.03	52.76	49.29	47.56	47.41	47.14	46.97	46.82	46.68
.2657 - .2968	145.28	108.42	87.43	66.40	61.24	55.95	52.50	52.32	52.10	51.67	51.29	50.89	50.49
.2970 - .3124	161.96	107.49	86.49	65.46	60.26	54.99	51.57	51.20	50.80	50.47	50.05	49.69	49.29
.3126 - .3437	153.54	114.56	93.56	72.57	67.35	62.06	58.61	58.59	58.41	58.21	58.02	57.62	57.20
.3439 - .3749	150.71	113.31	92.30	71.29	66.12	60.81	57.37	57.12	56.83	56.57	56.30	56.05	55.75
.3751 - .4061	153.93	121.41	100.41	79.42	74.19	68.93	65.46	65.32	65.18	65.02	64.84	64.70	64.54
.4063 - .4374	155.06	120.20	99.25	78.23	73.05	67.75	64.30	64.11	63.95	63.75	63.57	63.42	63.24
.4376 - .4687	162.91	126.38	105.35	84.35	79.16	73.88	70.43	70.35	70.22	70.14	70.05	69.96	69.90
.4689 - .4999	159.85	123.93	102.89	85.66	76.71	71.44	67.99	67.75	67.66	67.53	67.42	67.32	67.22
.5001 - .5311	188.27	154.42	131.94	131.14	126.86	122.6	118.30	114.03	109.79	105.50	101.25	96.97	92.70
.5313 - .5624	179.98	147.53	126.57	122.02	117.42	112.82	108.25	103.65	99.06	94.49	89.89	85.54	80.74
.5626 - .5937	193.92	158.94	134.84	130.26	125.73	121.16	116.58	112.01	107.47	102.88	98.32	93.76	89.16
.5939 - .6249	190.37	156.04	132.67	128.29	123.95	119.56	115.21	110.84	106.47	102.09	97.71	93.35	88.99
.6251 - .6561	192.02	157.40	134.19	130.36	126.52	122.68	118.81	114.99	111.12	107.31	103.46	99.61	95.75
.6563 - .6874	201.17	164.91	139.88	135.38	130.82	126.73	121.80	117.26	112.76	108.22	103.69	99.19	94.66
.6876 - .7187	212.38	174.09	148.20	143.72	139.21	134.70	130.21	125.71	121.21	116.58	112.21	107.68	103.18
.7189 - .7499	209.07	171.37	145.62	141.13	136.62	132.16	127.62	123.15	118.60	114.13	109.40	105.12	100.62
.7501 - .8124	222.42	182.31	154.57	149.26	143.96	138.63	133.29	127.99	122.70	117.34	112.04	106.75	101.43
.8126 - .8749	235.74	193.25	164.98	160.57	156.18	151.75	147.35	142.94	138.52	134.11	129.72	125.28	120.87
.8751 - .9374	251.81	206.41	175.48	170.14	164.77	159.42	154.05	148.68	143.37	138.00	132.65	127.26	121.92
.9376 - .9999	265.65	217.76	186.67	182.53	178.41	174.24	170.08	165.95	161.77	157.64	153.76	149.34	145.19
1.0001-1.1249	350.00	286.87	246.60	241.67	236.83	232.09	227.46	222.08	218.45	214.06	209.81	203.75	199.11
1.1251-1.2499	429.72	352.21	302.78	296.73	290.78	279.16	273.58	268.09	262.76	257.48	252.36	242.24	237.65
1.2501-1.3749	507.92	416.32	357.88	343.58	336.71	329.97	323.36	316.92	310.58	304.35	298.29	289.32	280.92
1.3751-1.4999	598.45	491.40	422.45	405.55	397.42	389.48	381.72	374.07	366.58	359.24	352.04	341.50	331.58

403 | Left Hand Spiral

INTERMEDIATE SIZES

Size Range	LIST PRICE EACH IN QUANTITIES OF:												
	1	2	3-5	6-7	8-11	12-17	18-23	24-35	36-47	48-59	60-71	72-95	96+
.0626 - .1093	142.51	107.94	102.87	98.03	93.20	88.33	83.47	78.65	73.77	68.92	64.09	59.20	54.35
.1095 - .1405	141.74	107.39	102.32	97.46	92.59	87.73	82.90	78.01	73.16	68.34	63.49	58.63	53.80
.1407 - .1718	146.37	110.88	109.34	104.18	99.06	93.92	88.76	83.62	78.50	73.34	68.20	63.08	57.92
.1720 - .2030	146.64	111.09	106.15	101.28	96.43	91.60	86.72	81.89	77.04	72.18	67.34	62.50	57.64
.2032 - .2655	144.76	109.68	104.76	99.88	95.04	90.19	85.36	80.50	75.64	70.82	65.94	61.08	56.24
.2657 - .2968	144.76	109.68	104.76	99.88	95.04	90.19	85.36	80.50	75.64	70.82	65.94	61.08	56.24
.2970 - .3124	150.58	114.09	109.13	104.33	99.51	94.73	89.91	85.11	80.28	75.50	70.82	65.88	61.06
.3126 - .3437	158.99	120.45	115.65	110.92	106.15	101.39	96.62	91.88	87.11	82.32	77.56	72.82	67.93
.3439 - .3749	156.31	120.24	115.41	110.68	105.94	101.20	96.47	91.74	86.98	82.26	77.51	72.76	68.04
.3751 - .4061	164.54	126.57	121.72	117.05	112.35	107.65	102.97	98.27	93.56	88.87	84.19	79.48	74.78
.4063 - .4374	164.87	126.83	121.97	117.29	112.56	107.91	103.18	98.51	93.79	89.11	84.40	79.73	75.03
.4376 - .4687	173.59	133.53	128.82	124.16	119.52	114.86	110.22	105.57	100.83	96.27	91.61	86.96	82.29
.4689 - .4999	171.36	131.81	127.12	122.45	117.80	113.11	108.44	103.76	99.08	94.43	89.76	85.10	80.43
.5001 - .5311	184.91	162.14	137.62	133.15	128.69	124.21	119.72	115.26	110.79	106.33	101.85	97.36	92.93
.5313 - .5624	180.74	157.27	133.72	129.49	125.28	121.07	116.83	112.63	108.42	104.20	99.96	95.75	91.55
.5626 - .5937	191.87	166.99	142.10	137.81	133.53	129.27	124.97	120.71	116.41	112.13	107.85	103.55	99.30
.5939 - .6249	194.24	164.01	139.65	135.41	131.19	126.99	122.77	118.57	114.35	110.12	105.89	101.10	97.47
.6251 - .6561	195.70	165.25	141.38	137.81	134.25	130.72	127.15	123.59	120.03	116.49	112.93	109.35	105.79
.6563 - .6874	205.04	173.14	147.62	143.45	139.34	135.16	131.01	126.86	122.71	118.57	114.43	110.25	106.09
.6876 - .7187	216.44	182.75	156.06	151.89	147.68	143.48	139.25	135.07	130.89	126.71	122.50	118.30	114.13
.7189 - .7499	213.07	179.91	153.47	149.34	145.19	141.04	136.90	132.75	128.60	124.46	120.28	116.15	112.00
.7501 - .8124	226.68	191.42	163.54	159.33	155.14	150.89	146.68	142.44	138.27	134.07	129.81	125.61	121.40
.8126 - .8749	240.29	202.93	173.65	169.50	165.39	161.27	157.14	152.99	148.89	144.75	140.65	136.50	132.37
.8751 - .9374	256.62	216.70	185.94	182.06	178.13	174.24	170.35	166.43	162.30	158.60	154.72	150.78	146.76
.9376 - .9999	270.80	228.65	196.77	193.21	189.63	186.05	182.47	178.89	175.32	171.74	168.15	164.60	161.00
1.0001-1.1249	373.41	315.34	271.06	265.64	260.33	249.91	244.94	240.01	235.21	230.54	225.91	221.40	212.78
1.1251-1.2499	459.48	387.98	333.51	326.84	320.30	307.50	301.34	295.32	289.44	283.62	277.94	269.61	261.80
1.2501-1.3749	542.15	466.62	393.56	385.65	377.98	362.87	355.58	348.48	341.50	334.66	327.99	318.14	308.92
1.3751-1.4999	642.09	542.20	466.09	456.76	447.62	429.72	421.13	412.70	404.90	396.35	388.46	376.78	365.88





32 Valve Guide Reamers

HIGH SPEED STEEL



500
Left Hand
Spiral

FLUTE SIZE	PILOT SIZE	VALVE STEM	OVERALL LENGTH	FLUTE LENGTH	PILOT LENGTH	SHANK DIAMETER	SQUARE SIZE	LIST PRICE
.2165	.2035	5.5mm	7	2-7/8	1	.2115	.1820	47.07
.2362	.2230	6mm	7	2-7/8	1	.2310	.1820	47.07
.2600	.2470	1/4	7	2-7/8	1	.2550	.1820	47.07
.2750	.2620	7mm	7	2-7/8	1	.2700	.1820	47.07
.2756	.2626	7mm	7	2-7/8	1	.2700	.1820	47.07
.2760	.2630	7mm	7	2-7/8	1	.2710	.1820	47.07
.2770	.2640	7mm	7	2-7/8	1	.2720	.1820	47.07
.3110	.2980	5/16	7	2-7/8	1	.3060	.2450	47.07
.3120	.2990	5/16	7	2-7/8	1	.3070	.2450	47.07
.3130	.3000	5/16	7	2-7/8	1	.3080	.2450	47.07
.3140	.3010	5/16	7	2-7/8	1	.3090	.2450	47.07
.3150	.3020	8mm	7	2-7/8	1	.3100	.2450	47.07
.3160	.3030	5/16	7	2-7/8	1	.3110	.2450	47.07
.3170	.3040	5/16	7	2-7/8	1	.3120	.2450	47.07
.3180	.3050	5/16	7	2-7/8	1	.3130	.2450	47.07
.3270	.3140	5/16	7	2-7/8	1	.3220	.2450	47.07
.3420	.3290	11/32	7	2-7/8	1	.3370	.2450	49.28
.3430	.3300	11/32	7	2-7/8	1	.3380	.2450	49.28
.3435	.3305	11/32	7	2-7/8	1	.3385	.2450	49.28
.3440	.3310	11/32	7	2-7/8	1	.3390	.2450	49.28
.3450	.3320	11/32	7	2-7/8	1	.3400	.2450	49.28
.3460	.3330	11/32	7	2-7/8	1	.3410	.2450	49.28
.3543	.3413	9mm	7	2-7/8	1	.3490	.2450	49.28
.3580	.3450	3/8	7	2-7/8	1	.3530	.2450	49.28
.3730	.3600	3/8	7	2-7/8	1	.3680	.2450	49.28
.3740	.3610	3/8	7	2-7/8	1	.3690	.2450	49.28
.3750	.3620	3/8	7	2-7/8	1	.3700	.2450	49.28
.4370	.4240	7/16	7	2-7/8	1	.4320	.2450	51.53
.4530	.4400	11.5mm	7	2-7/8	1	.4480	.2450	51.53
.5000	.4870	1/2	7	2-7/8	1	.4950	.2450	51.53

INTERMEDIATE SIZES

SIZE RANGE	1	2	3-5	6-7	8-11	12+
.1969 - .2164	65.20	62.10	58.82	55.53	52.23	47.07
.2166 - .3179	66.94	63.70	60.40	57.13	53.82	48.45
.3181 - .4330	68.66	65.20	61.92	58.66	55.39	49.85
.4331 - .5312	70.37	66.90	63.60	60.32	57.07	51.38
.5313 - .6250	70.46	67.39	64.16	60.94	57.71	51.94
Above .6250	Please call for pricing					



451 | Straight Shank

NO. OF TAPER	SMALL END	LARGE END	SHANK DIAMETER	NO. FLUTES	FLUTE LENGTH	OVERALL LENGTH	451 LIST PRICE
0	.2503	.3674	5/16	6	2-1/4	3-3/4	66.02
1	.3674	.5170	7/16	6	3	5	85.97
2	.5696	.7444	5/8	8	3-1/2	6	100.41
3	.7748	.9881	7/8	8	4-1/4	7-1/4	144.74
4	1.0167	1.2893	1-1/8	8	5-1/4	8-1/2	212.02
5	1.4717	1.8005	1-1/2	10	6-1/4	9-3/4	384.22



457 | Taper Shank

NO. OF TAPER	SMALL END	LARGE END	TAPER SHANK NO.	NO. FLUTES	FLUTE LENGTH	OVERALL LENGTH	457 LIST PRICE
0	.2503	.3674	0	6	2-1/4	5-11/32	99.57
1	.3674	.5170	1	6	3	6-5/16	109.54
2	.5696	.7444	2	8	3-1/2	7-3/8	131.96
3	.7748	.9881	3	8	4-1/4	8-7/8	181.12
4	1.0167	1.2893	4	8	5-1/4	10-7/8	287.18
5	1.4717	1.8005	5	10	6-1/4	13-1/8	571.04

Brown & Sharpe Taper Finishing Reamers



496 | Straight Shank

NO. OF TAPER	SMALL END	LARGE END	SHANK DIAMETER	NO. FLUTES	FLUTE LENGTH	OVERALL LENGTH	496 LIST PRICE
1	.1974	.3176	9/32	6	2-7/8	4-3/4	83.89
2	.2474	.3781	11/32	6	3-1/8	5-1/8	94.52
3	.3099	.4510	13/32	6	3-3/8	5-1/2	100.12
4	.3474	.5017	7/16	6	3-11/16	5-7/8	105.22
5	.4474	.6145	9/16	6	4	6-3/8	110.84
6	.4974	.6808	5/8	8	4-3/8	6-7/8	117.17
7	.5974	.8011	3/4	8	4-7/8	7-1/2	125.76
8	.7474	.9770	13/16	8	5-1/2	8-1/8	170.73
9	.8974	1.1530	1	8	6-1/8	8-7/8	220.43
10	1.0420	1.3376	1-1/8	8	6-7/8	9-3/4	285.41





34 Taper Pin Reamers

HIGH SPEED STEEL

487 | Straight Flute



491 | Left Hand Spiral



488 | Left Hand Helical



SIZE	DIAMETER SMALL END	DIAMETER LARGE END	FLUTE LENGTH	OVERALL LENGTH	SHANK DIAMETER	487 LIST PRICE	# OF FL.	491 LIST PRICE	# OF FL.	488 LIST PRICE	# OF FL.
7/0	.0497	.0666	13/16	1-13/16	5/64	44.16	4	45.84	4	41.37	2
6/0	.0611	.0806	15/16	1-15/16	3/32	44.16	4	45.84	4	41.37	2
5/0	.0719	.0966	1-3/16	2-3/16	7/64	40.23	4	44.16	4	40.02	2
4/0	.0869	.1142	1-5/16	2-5/16	1/8	40.23	4	44.16	4	40.02	3
3/0	.1029	.1302	1-5/16	2-5/16	9/64	40.23	4	44.16	4	40.02	3
2/0	.1137	.1462	1-9/16	2-9/16	5/32	36.01	4	38.57	4	36.54	3
0	.1287	.1638	1-11/16	2-15/16	11/64	34.64	4	36.89	4	37.46	3
1	.1447	.1798	1-11/16	2-15/16	3/16	33.54	6	37.46	6	38.00	3
2	.1605	.2008	1-15/16	3-3/16	13/64	33.54	6	37.46	6	43.02	3
3	.1813	.2294	2-5/16	3-11/16	15/64	33.54	6	37.46	6	44.48	3
4	.2071	.2604	2-9/16	4-1/16	17/64	37.46	6	40.83	6	50.07	3
5	.2409	.2994	2-13/16	4-5/16	5/16	40.23	6	43.54	6	54.79	3
6	.2773	.3540	3-11/16	5-7/16	23/64	48.61	6	53.65	6	64.29	3
7	.3297	.4220	4-7/16	6-5/16	13/32	62.57	6	67.86	6	79.36	3
8	.3971	.5050	5-3/16	7-3/16	7/16	80.12	6	87.73	6	93.11	3
9	.4805	.6066	6-1/16	8-5/16	9/16	95.51	6	103.97	6	100.47	4
10	.5799	.7216	6-13/16	9-5/16	5/8	104.85	8	115.26	8	127.57	4
11	.7060	.8780	8-1/4	11-1/4	3/4	111.76	8	122.96	8	135.23	4
12	.8420	1.0500	10	13-7/8	3/4	172.93	8	190.22	8	209.32	4
13	1.0090	1.2590	12	16	1-1/16	335.40	10	368.95	10	565.45	6
14	1.2500	1.5420	14	18-1/4	1-13/32	542.20	10	596.40	10	654.88	6



600 | STD



604 | 4" OAL



601 | TAP



606 | 6" OAL

NOMINAL SIZE	SMALL DIAMETER	LARGE DIAMETER	# OF FLUTES	FLUTE LENGTH	OVERALL LENGTH	SHANK DIAMETER	SIZE OF SQUARE	600 LIST PRICE	601 LIST PRICE	604 LIST PRICE	606 LIST PRICE
1/16	.2320	.2750	6	1-3/4	2-1/8	.3125	.235	55.23	25.49	71.80	82.80
1/8	.3160	.3620	6	1-3/4	2-1/8	.4375	.328	51.48	25.49	66.93	77.22
1/4	.4060	.4720	6	1-1/16	2-7/16	.5625	.421	58.94	28.10	76.64	88.42
3/8	.5400	.6060	6	1-1/16	2-9/16	.7000	.531	65.56	35.68	85.20	98.32
1/2	.6650	.7510	6	1-3/8	3-1/8	.6875	.515	82.78	57.92	107.64	124.19
3/4	.8760	.9620	8	1-3/8	3-1/4	.9063	.679	114.81	80.40		
1	1.1030	1.2120	8	1-3/4	3-3/4	1.1250	.843	168.91	122.30		
1-1/4	1.4440	1.5530	10	1-3/4	4	1.3125	.984	284.53	174.58		
1-1/2	1.6840	1.7930	10	1-3/4	4-1/4	1.5000	1.125	359.76	234.22		
2	2.1590	2.2680	12	1-3/4	4-1/2	1.8750	1.406	480.52	318.59		

Please Call For Pricing



36 Capscrew Counterbores



HIGH SPEED STEEL

- 301** | On Size
- 302** | 1/64 Over Size
- 303** | 1/32 Over Size



CAPSCREW SIZE	STYLE	PILOT SIZE	PILOT LENGTH	FLUTE SIZE	BODY LENGTH	SHANK DIAMETER	OVERALL LENGTH	LIST PRICE
4	301	.1120	1/8	.1830	9/16	.1562	3-7/8	25.34
	302	.1270	1/8	.1990	9/16	.1562	3-7/8	25.34
	303	.1430	1/8	.2150	9/16	.1562	3-7/8	25.34
5	301	.1250	5/32	.2050	5/8	.1875	4-1/8	25.34
	302	.1400	5/32	.2210	5/8	.1875	4-1/8	25.34
	303	.1560	5/32	.2370	5/8	.1875	4-1/8	25.34
6	301	.1380	3/16	.2270	3/4	.2188	4-5/8	26.85
	302	.1530	3/16	.2430	3/4	.2188	4-5/8	26.85
	303	.1690	3/16	.2590	3/4	.2188	4-5/8	26.85
8	301	.1640	7/32	.2700	3/4	.2500	5	28.75
	302	.1790	7/32	.2860	3/4	.2500	5	28.75
	303	.1950	7/32	.3020	3/4	.2500	5	28.75
10	301	.1900	1/4	.3120	7/8	.2812	5-1/4	29.37
	302	.2050	1/4	.3280	7/8	.2812	5-1/4	29.37
	303	.2180	1/4	.3440	7/8	.2812	5-1/4	29.37
1/4	301	.2500	9/32	.3800	1	.3125	5-5/8	30.86
	302	.2650	9/32	.3960	1	.3125	5-5/8	30.86
	303	.2810	9/32	.4120	1	.3125	5-5/8	30.86
5/16	301	.3125	5/16	.4740	1	.3750	6-1/8	38.55
	302	.3280	5/16	.4890	1	.3750	6-1/8	38.55
	303	.3430	5/16	.5040	1	.3750	6-1/8	38.55
3/8	301	.3750	3/8	.5690	1-1/4	.5000	6-1/2	41.40
	302	.3900	3/8	.5850	1-1/4	.5000	6-1/2	41.40
	303	.4060	3/8	.6010	1-1/4	.5000	6-1/2	41.40
7/16	301	.4370	7/16	.6610	1-1/4	.5000	7	49.76
	302	.4520	7/16	.6760	1-1/4	.5000	7	49.76
	303	.4680	7/16	.6910	1-1/4	.5000	7	49.76
1/2	301	.5000	1/2	.7550	1-1/2	.5000	7-1/2	56.98
	302	.5150	1/2	.7710	1-1/2	.5000	7-1/2	56.98
	303	.5310	1/2	.7870	1-1/2	.5000	7-1/2	56.98
5/8	301	.6250	5/8	.9430	1-1/2	.6250	7-5/8	92.95
	302	.6400	5/8	.9590	1-1/2	.6250	7-5/8	92.95
	303	.6560	5/8	.9750	1-1/2	.6250	7-5/8	92.95
3/4	301	.7500	3/4	1.1310	1-5/8	.7500	7-3/4	108.13
	302	.7650	3/4	1.1470	1-5/8	.7500	7-3/4	108.13
	303	.7810	3/4	1.1630	1-5/8	.7500	7-3/4	108.13
7/8	301	.8750	7/8	1.3200	1-7/8	.8750	8	131.70
	302	.8910	7/8	1.3360	1-7/8	.8750	8	131.70
	303	.9060	7/8	1.3520	1-7/8	.8750	8	131.70
1	301	1.0000	1	1.5080	2	1.0000	8-1/2	167.06
	302	1.0150	1	1.5240	2	1.0000	8-1/2	167.06
	303	1.0310	1	1.5400	2	1.0000	8-1/2	167.06

METRIC SIZES

CAPSCREW SIZE	STYLE	PILOT SIZE	PILOT LENGTH	FLUTE SIZE	BODY LENGTH	SHANK DIAMETER	OVERALL LENGTH	LIST PRICE
3mm	302	.1377	5/32	.2362	5/8	.1875	4-1/8	25.34
4mm	302	.1772	7/32	.2953	3/4	.2500	5	28.75
5mm	302	.2165	9/32	.3543	1	.3125	5-5/8	30.86
6mm	302	.2559	5/16	.4134	1	.3750	6-1/8	38.55
8mm	302	.3346	3/8	.5315	1-1/4	.5000	6-1/2	41.40
10mm	302	.4134	7/16	.6496	1-1/4	.5000	7	49.76
12mm	302	.4921	1/2	.7283	1-1/2	.5000	7-1/2	56.98
14mm	302	.5709	5/8	.8465	1-1/2	.6250	7-5/8	92.95
16mm	302	.6500	5/8	.9645	1-1/2	.6250	7-5/8	92.95
18mm	302	.7280	3/4	1.0830	1-5/8	.7500	7-3/4	108.13
20mm	302	.8070	7/8	1.2010	1-7/8	.8750	8	131.70
22mm	302	.8860	7/8	1.3190	1-7/8	.8750	8	131.70
24mm	302	.9650	1	1.4370	2	1.0000	8-1/2	167.06



485 | Left Hand Spiral

DECIMAL	FRACTION	OVERALL LENGTH	MORSE TAPER NO.	# OF FLUTES	FLUTE LENGTH	SMALL DIAMETER	485 LIST PRICE
0.4375	7/16	9	2	5	5-1/8	.3050	54.56
0.5000	1/2	9	2	5	5-1/8	.3125	60.73
0.5625	9/16	9	2	5	5-1/8	.3430	60.73
0.6250	5/8	10	2	5	6-1/8	.3750	65.58
0.6875	11/16	11-3/4	3	5	7-1/8	.3906	70.14
0.7500	3/4	12	3	5	7-3/8	.5000	91.31
0.8125	13/16	12	3	5	7-3/8	.5000	91.31
0.8750	7/8	12	3	5	7-3/8	.5625	100.10
0.9375	15/16	12	3	5	7-3/8	.6250	106.86
1.0000	1	12	3	5	7-3/8	.6875	116.17
1.0625	1-1/16	12	3	5	7-3/8	.7500	120.59
1.1250	1-1/8	12	3	5	7-3/8	.8125	147.16
1.1875	1-3/16	12	3	5	7-3/8	.8750	188.08
1.2500	1-1/4	13	4	5	7-3/8	.9375	214.00
1.3125	1-5/16	13	4	5	7-3/8	1.0000	252.91

Construction Reamers

HIGH SPEED STEEL

495 | Left Hand Spiral - Round Shank



595 | Left Hand Spiral - Round Shank w/3 flats

DECIMAL	FRACTION	OVERALL LENGTH	# OF FLUTES	FLUTE LENGTH	SMALL DIAMETER	495 LIST PRICE	595 LIST PRICE
0.3750	3/8	5-1/4	5	3-5/8	.1645	41.91	48.03
0.4375	7/16	5-1/4	5	3-5/8	.1645	56.32	63.47
0.5000	1/2	6	5	4-3/8	.2340	64.76	72.90
0.5625	9/16	6-5/8	5	5	.2920	77.59	85.58
0.6250	5/8	6-5/8	5	5	.3520	91.05	99.05
0.6875	11/16	7	5	5-3/8	.4140	108.99	117.00
0.7500	3/4	7	5	5-3/8	.4770	125.24	133.25
0.8125	13/16	7-1/4	5	5-5/8	.5400	129.93	137.93
0.8750	7/8	7-1/4	5	5-5/8	.6020	129.93	137.93
0.9375	15/16	7-1/4	5	5-5/8	.6450	165.07	173.07
1.0000	1	7-1/4	5	5-5/8	.7270	165.07	173.07





#17W



#30

#44



High Speed Steel

SET #	# OF TOOLS	DESCRIPTION	SERIES	CASE TYPE	LIST PRICE
#17	25	Metric Sizes 1mm - 13mm by 1/2 mm	433	Metal	676.07
#17P	25	Metric Sizes 1mm - 13mm by 1/2 mm	433	Plastic Roll	641.32
#17W	13	Metric Sizes 1mm - 7mm by 1/2 mm	433	Wood	325.70
#40	29	Fractional Sizes 1/16" - 1/2" by 1/64"	433	Metal	732.36
#40-32M	15	Fractional Sizes 1/16" - 1/2" by 1/32"	433	Metal	392.74
#40-32P	15	Fractional Sizes 1/16" - 1/2" by 1/32"	433	Plastic Roll	353.88
#40W	29	Fractional Sizes 1/16" - 1/2" by 1/64"	433	Wood	822.39
#40S	29	Fractional Sizes 1/16" - 1/2" by 1/64" Right Hand Spiral	435	Metal	817.64
#41	60	Wire Gauge Sizes #1-#60	433	Metal	1,096.13
#70	20	Wire Gauge Sizes #61-#80	433	Metal	409.88
#41S	60	Wire Gauge Sizes #1-#60 Right Hand Spiral	435	Metal	1,254.41
#42	26	Letter Sizes A - Z	433	Metal	723.87
#42S	26	Letter Sizes A - Z Right Hand Spiral	435	Metal	793.03
#43	14	Over/Under Sizes .1240-.5010	433	Metal	377.81
#43P	14	Over/Under Sizes .1240-.5010	433	Plastic Roll	350.34
#43W	14	Over/Under Sizes .1240-.5010	433	Wood	442.97
#44	21	Over/Under Sizes .1240-.5010 with Fractions by 1/16"	433	Plastic Roll	532.34
#43S	14	Over/Under Sizes .1240-.5010 Right Hand Spiral	435	Metal	430.28
#43SW	14	Over/Under Sizes .1240-.5010 Right Hand Spiral	435	Wood	493.78

M-42 8% Cobalt

SET #	# OF TOOLS	DESCRIPTION	SERIES	CASE TYPE	LIST PRICE
#40C	29	Fractional Sizes 1/16" - 1/2" by 1/64" Cobalt	1433	Metal	960.67
#40CW	29	Fractional Sizes 1/8" - 1/2" by 1/64" Cobalt	1433	Wood	1,125.75
#40CSW	29	Fractional Sizes 1/16" - 1/8" by 1/64" Cobalt Right Hand Spiral	1433	Wood	1,052.48
#41C	60	Wire Gauge Sizes #1-#60 Cobalt	1433	Metal	1,171.63
#42C	26	Letter Sizes A - Z Cobalt	1433	Metal	945.90
#43C	14	Over/Under Sizes .1240-.5010 Cobalt	1433	Metal	493.60
#43CW	14	Over/Under Sizes .1240-.5010 Cobalt	1433	Wood	559.03
#43CSW	14	Over/Under Sizes .1240-.5010 Cobalt Right Hand Spiral	1435	Wood	592.07
#30C	14	Dowel Pin Sizes .1230-.5000 Cobalt	1470	Metal	474.64

Dowel Pins

SET #	# OF TOOLS	DESCRIPTION	SERIES	CASE TYPE	LIST PRICE
#30	14	Dowel Pin Sizes .1230-.4995	470	Metal	377.77
#30C	14	Dowel Pin Sizes .1230-.4995 Cobalt	1470	Metal	474.64
#30W	14	Dowel Pin Sizes .1230-.4995 Cobalt	470	Wood	442.97

Production Length

SET #	# OF TOOLS	DESCRIPTION	SERIES	CASE TYPE	LIST PRICE
#60	29	Fractional Sizes 1/16" - 1/2" by 1/64"	333	Metal	633.43
#60-64M	13	Fractional Sizes 1/16" - 1/4" by 1/64"	333	Metal	207.53
#60-32M	15	Fractional Sizes 1/16" - 1/2" by 1/32" Right Hand Spiral	335	Metal	343.30
#61	60	Wire Gauge Sizes #1-#60	333	Metal	939.27
#62	26	Letter Sizes A - Z	333	Metal	600.76

#4876



#4917



#301



#4953



#5957



#302W



Taper Pins

SET #	# OF TOOLS	DESCRIPTION	SERIES	CASE TYPE	LIST PRICE
#4876	6	Taper Pin Set #0 - #5 Straight Flute	487	Plastic	234.73
#4877	7	Taper Pin Set 7/0 - #0 Straight Flute	487	Plastic	301.45
#4886	6	Taper Pin Set #0 - #5 Left Hand Helical	488	Plastic	289.65
#4887	7	Taper Pin Set 7/0 - #0 Left Hand Helical	488	Plastic	298.62
#4916	6	Taper Pin Set #0 - #5 Left Hand Spiral	491	Plastic	255.44
#4917	7	Taper Pin Set 7/0 - #0 Left Hand Spiral	491	Plastic	321.41

Construction Reamers

SET #	# OF TOOLS	DESCRIPTION	SERIES	CASE TYPE	LIST PRICE
#4953	3	Construction Reamers 3/8" - 1/2"	495	Wood Case	210.60
#4957	7	Construction Reamers 3/8" - 1"	495	Wood Case	763.37
#5953	3	Construction Reamers with Flats 3/8" - 1/2"	595	Wood Case	238.01
#5957	7	Construction Reamers with Flats 3/8" - 1"	595	Wood Case	815.32

Counterbores

SET #	# OF TOOLS	DESCRIPTION	SERIES	CASE TYPE	LIST PRICE
#301	10	Standard Counterbore Sizes #4 - 1/2"	301	Plastic Roll	371.45
#301W	10	Standard Counterbore Sizes #4 - 1/2"	301	Wood Case	466.61
#302	10	1/64" O/S Counterbore Sizes #4 - 1/2"	302	Plastic Roll	371.45
#302W	10	1/64" O/S Counterbore Sizes #4 - 1/2"	302	Wood Case	466.61
#303	10	1/32" O/S Counterbore Sizes #4 - 1/2"	303	Plastic Roll	371.45
#303W	10	1/32" O/S Counterbore Sizes #4 - 1/2"	303	Wood Case	466.61
#51	8	Metric Counterbore Sizes 3mm - 14mm	302	Plastic Roll	386.82
#51W	8	Metric Counterbore Sizes 3mm - 14mm	302	Wood Case	466.40

*Individual Cases Available Upon Request



PHONE **800.343.2404**
 sales@yankeereamer.com
 www.yankeereamer.com



Reamer Nomenclature

(According to ANSI Standards B94.2)

AXIS

The imaginary straight line which forms the longitudinal center line of a reamer, usually established by rotating the reamer between centers.

BACK TAPER

A slight decrease in taper, from front to back, in the flute length of the reamer.

CHIP BREAKERS

Notches or grooves in the cutting edges of some taper reamers designed to break the continuity of the chips.

CIRCULAR LAND

See Margin below.

CHAMFER

The angular cutting portion at the entering end of a reamer. *See Fig. 4 on page 42.*

CORE

The central portion of the reamer below the flutes which joins the lands.

FLUTES

Longitudinal channels formed in the body of the reamer to provide cutting edges, permit passage of chips, and allow cutting fluid to reach the cutting edges.

GUIDE/BACKPILOT

A cylindrical portion following the flutes of a reamer to maintain alignment.

HAND OF CUT (LEFT)

When viewed from the cutting end, the reamer must revolve clockwise to cut.

HAND OF CUT (RIGHT)

When viewed from the cutting end, the reamer must revolve counter clockwise to cut.

HELIX ANGLE

The angle which a helical cutting edge at a given point makes with the axial plane through the same point. *See Fig. 4 on page 42.*

LAND

The section of the reamer between adjacent flutes.

LEAD OF FLUTE

The axial advance of a helical or spiral cutting edge in one turn around the reamer axis.

MARGIN

The unrelieved part of the periphery of the land adjacent to the cutting edge. *See Fig. 1 on page 42.*

PILOT

A cylindrical portion preceding the entering end of the reamer body to maintain alignment.

RAKE

The angular relationship between the cutting face, or a tangent to the cutting face at a given point and a given reference plane or line. *See Fig. 1 on page 42.*

RELIEF

Result of the removal of tool material behind or adjacent to the cutting edge to provide clearance and prevent rubbing (heel drag).

TAPER PER FOOT

The different in diameter between two points 12 inches apart measured along the axis.

HAND OF FLUTE HELIX

A reamer has **Right Hand Helix** when the flutes twist away from the observer in a clockwise direction when viewed from either end of the reamer.

A reamer has **Left Hand Helix** when the flutes twist away from the observer in a counter clockwise direction when viewed from either end of the reamer.





Reamers

YANKEE	CLEVELAND	CHICAGO LATROBE	MORSE	REGAL-BELOIT	ALVORD POLK	L & I	21ST CENTURY
433	4001	405	1655	330 & 320	127-0	533	2270
435	4030	405-RS	1653	332 & 322	127-1	535	2271
435L	609	—	1652	331 & 321	127-2	535L	2272
1433	—	—	2655	330C & 320C	128-0	1533	—
1435	—	—	—	332C & 322C	—	1535	—
333	4050	—	—	370	—	SC533	—
335	4060	—	—	372	—	SC535	—
470	—	—	1655D	330	127-0	570	2270
475	—	—	—	332	127-1	575	2271
475L	—	—	—	331	127-2	575-L	2272
1470	—	—	—	330C	—	1570	—
1475	—	—	—	332C	—	1575	—
436	4005	400	1656	380	131-0	536	—
437	4035	400-RS	1654	382	131-1	537	—
406	628	—	1617	420	105-0	506	—
431	504	—	1733	—	—	531	—
432	516	—	1734	—	—	532	—
400	624	420	1601	350	101-0	500	2010
403	645	420-S	1602	351	101-2	503	2012
500	—	—	—	—	—	—	—
451	644	218	1636	—	161-0	551	—
457	644B	—	1635	—	163-0	557	—
496	—	—	—	—	261-0	596	—
487	657	245	1680	500	155-0	587	2550
488	650	231	1683	501	155-H	588	2554
491	659	245-S	1684	502	155-2	591	2552
600	—	853	2116	—	207-2	600	—
601	—	—	—	—	—	—	—
604	—	—	—	—	—	—	—
606	—	—	—	—	—	—	—
485	—	—	—	511	653-0	—	—
495	—	340	1650R	—	650-H	—	—
595	—	—	1650	—	—	—	—
301	—	—	1766	—	500-1	—	5000
302	—	—	1766	—	400-1	—	4000
303	—	—	1766	—	300-1	—	3000



5-FLUTES 25° R.H. SPIRAL
UCW FINISH R.H. CUT

0.006-0.010 RELIEF ON 45°

±0.002
±0.000

8° ± 1°
L-H HELIX

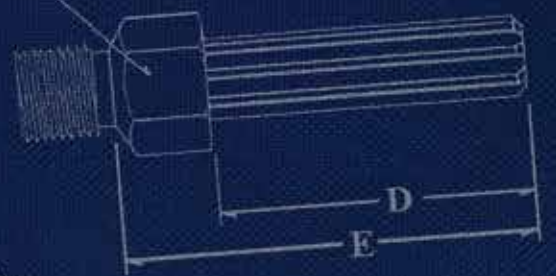
45° ± 2°
BACK-OFF
6" TO 8"

A 5
DIA.

.001 MAX. VARIATION



NOTE A 5
SMOOTH FLUTES ARE
DIA. FLUTES ARE
FOR PASSAGE OF
COOLANT ONLY



FLUTES 1/8" DEEP
AS SHOWN
CONCENTRIC WITHIN

TUMBLING SPEC ENG. LTR



WASH NO	A	B	C	NO OF FLUTES
	±0.002 ±0.000		±0.060 FLUTE LENGTH	4/6
	.180		1.250	4/6
	.246		1.500	4/6
			500	4/6



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