

REAMER SPEED AND FEED RECOMMENDATIONS

Speed and Feed

REAMERS



Material		Speed SFM	Feed (I.P.R.)		
			1/8"	1/4"	1/2"
Aluminum / Aluminum Alloys		100 - 300	0.005"	0.010"	0.015"
Aluminum Alloyed Si > 10%		75 - 200	0.004"	0.008"	0.012"
Cast Irons	Soft	75 - 150	0.005"	0.008"	0.012"
	Medium	60 - 100	0.005"	0.008"	0.012"
Malleable		40 - 100	0.003"	0.006"	0.010"
Brass		75 - 175	0.003"	0.004"	0.006"
Bronze		65 - 125	0.003"	0.004"	0.006"
Coppers / Copper Alloys		75 - 150	0.005"	0.008"	0.012"
Magnesium		150 - 250	0.005"	0.010"	0.015"
Nickel Alloys		50 - 90	0.005"	0.008"	0.012"
Stainless Steels	Free Machining	50 - 90	0.005"	0.008"	0.012"
	Work Hardening	30 - 75	0.003"	0.006"	0.010"
Steels	Low Carbon	60 - 125	0.003"	0.006"	0.010"
	Medium Carbon	100 - 150	0.003"	0.005"	0.008"
High Tensile (35 - 40Rc)		90 - 125	0.003"	0.005"	0.008"
High Tensile (40 - 45Rc)		60 - 100	0.001"	0.004"	0.006"
High Tensile (45Rc +)		30 - 90	0.002"	0.002"	0.004"
Tool Steels		60 - 100	0.002"	0.005"	0.008"
Titanium	Soft	50 - 125	0.003"	0.006"	0.010"
	Hard	20 - 60	0.002"	0.004"	0.008"

FLUTE STYLES



STRAIGHT FLUTES

For all types of general reaming applications.



RH SPIRAL FLUTES

For blind holes and abrasive, ductile materials. Do not use for holes with interruptions unless material is reasonably soft.



LH SPIRAL FLUTES

Produces better finishes on hard materials such as heat-treated steels. Shear action is excellent for holes with interruptions; i.e., keyways, elongated slots, etc.

STOCK REMOVAL

Sufficient amount of stock should be left in the work area to permit the reamer to cut rather than to burnish or glaze.

The amount of stock removal for machine reaming:

Reamer Diameter	Suggested Stock Removal
1/4"	.008" - .010"
1/4" - 1/2"	.012" - .015"
1/2" - 1"	.017" - .020"
1" - 1-1/2"	.020" - .025"

The use of coolants will help produce a superior finish when reaming.