

# REAMERS - SPEED AND FEED RECOMMENDATIONS

## Material

Speed  
SFM

Feed (I.P.R.)  
1/8 1/4 1/2

Aluminum / Aluminum Alloys		100 - 300	.005	.010	.015
Aluminum Alloyed Si > 10%		75 - 200	.004	.008	.012
Cast Irons:	Soft	75 - 150	.005	.008	.012
	Medium	60 - 100	.005	.008	.012
	Malleable	40 - 100	.003	.006	.010
	Brass	75 - 175	.003	.004	.006
	Bronze	65 - 125	.003	.004	.006
Coppers / Copper Alloys		75 - 150	.005	.008	.012
Magnesium		150 - 250	.005	.010	.015
Nickel Alloys		50 - 90	.005	.008	.012
Stainless Steels: Free Machining		50 - 90	.005	.008	.012
		30 - 75	.003	.006	.010
	Work Hardening	60 - 125	.003	.006	.010
Steels:	Low Carbon	100 - 150	.003	.005	.008
	Medium Carbon	90 - 125	.003	.005	.008
	High Tensile (35 - 40Rc)	60 - 100	.001	.004	.006
	High Tensile (40 - 45Rc)	30 - 90	.002	.002	.004
	High Tensile (45Rc+ )	60 - 100	.002	.005	.008
Tool Steels		50 - 125	.003	.006	.010
Titanium	Soft	20 - 60	.002	.004	.008
	Hard				

## 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

## FLUTE STYLES



**STRAIGHT FLUTES**



**RH SPIRAL FLUTES**



**LH SPIRAL FLUTES**

### 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.