

Solid Carbide 30° & 60° Degree Engraving Router Bits Speed and Feed Chart

Chip Load Per Tooth IPR**

Material	(Tip Width)	(Tip Width)
	0.005" - 0.090"	0.005" - 0.090"
	30°	60°
Soft Wood	0.003" - 0.007"	0.004" - 0.006"
Hard Wood	0.003" - 0.007"	0.004" - 0.006"
Soft Plastic	0.003" - 0.007"	0.004" - 0.006"
Hard Plastic	0.003" - 0.007"	0.004" - 0.006"
Aluminum	0.003" - 0.007"	0.004" - 0.006"
Solid Surface	0.003" - 0.007"	0.004" - 0.006"

Tool Reference #'s	
30°	60°
45771	45760
45772	45761
45773	45763
45774	45765
45775	45766
45776	45767
45777	45768
45779	45769

Operating RPM: 18,000

IPR** Inches per revolution

Simple Machining Calculations:

To find **RPM:** SFM x 3.82 / diameter of tool

To find **SFM:** 0.262 x diameter of tool x RPM

To find **Feed Rate:** RPM x # of flutes x chip load

Depth of Cut: 1 x D Use recommended chip load

2 x D Reduce chip load by 25%

3 x D Reduce chip load by 50%