Amana Tool®

INDUSTRIAL

Solid Carbide Fiberglass Abrasive Type Plunge Diamond Pattern Router Bits

Depth of Cut: 1 x Tool Diameter †

Material	Spindle Speed SFM*		Chip Load Per Revolution IPR**		
			#46099/46110/ 46110-M	#46112	#46123
	1/4" (0.250) / 6mm	1/2" (0.500)	1/4" (0.250) / 6mm	1/4" (0.250)	1/2" (0.500)
Carbon, Carbon Graphite, Unfilled Plastics	1,600 - 3,200	1,600 - 3,200	0.0025" - 0.0040"	0.0035" - 0.0050"	0.0075" - 0.0090"
Composites	1,200 - 2,800	1,600 - 3,200	0.0008" - 0.0020"	0.0018" - 0.0030"	0.0060" - 0.0080"
Fiberglass Filled Plastics	1,200 - 2,800	1,600 - 3,200	0.0008" - 0.0020"	0.0018" - 0.0030"	0.0060" - 0.0080"
Green Ceramic, Green Carbide	800 - 1,600	800 - 1,600	0.0015" - 0.0030"	0.0025" - 0.0040"	0.0060" - 0.0080"

SFM* Surface feet per minute
IPR** Inches per revolution

† Depth of Cut: 1 x D Use recommended feed rate
2 x D Reduce feed rate by 25%
3 x D Reduce feed rate by 50%

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 IPM:** RPM x # of flutes x chip load
To find **Chip Load:** Feed Rate IPM / (RPM x # of flutes)
To find **Ramp Down:** Feed Rate IPM / # of flutes

Disclaimer: It is important to understand that these values are only recommendations.