

2 Flute Solid Carbide Foam Cutting Spiral Router Bits

CNC Operating Spindle Speed: 18,000 RPM / Depth of Cut: 1 x Tool Diameter †

Material	Diameter									
	Ø1/8" (0.125) / 3mm		Ø3/16" (0.1875)		Ø1/4" (0.250) / 6mm		Ø5/16" (0.3125)		Ø3/8" (0.375)	
	Feed Rate IPM**	Chip Load Per Tooth	Feed Rate IPM**	Chip Load Per Tooth	Feed Rate IPM**	Chip Load Per Tooth	Feed Rate IPM**	Chip Load Per Tooth	Feed Rate IPM**	Chip Load Per Tooth
Foam	100" - 140"	0.002" - 0.004"	100" - 140"	0.002" - 0.004"	140" - 210"	0.004" - 0.006"	140" - 210"	0.004" - 0.006"	140" - 210"	0.004" - 0.006"

*SFM Surface feet per minute

**IPM Inches per minute

Tool Reference #s	Diameter
Square End	
46269	1/8"
46270	1/8"
46271	3/16"
46272	1/4"
46273	3/16"
46274	1/4"
46275	1/4"
46276	5/16"
46277	3/8"
46278	3/8"
46279	3/8"
46562	1/8"
46564	1/8"
46566	1/4"
48442	3mm
48444	6mm
Ball End	
46030	1/8"
46032	1/4"

† **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.