



## **2 Flute Solid Carbide Foam Cutting Spiral Router Bits**

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

	Diameter									
	Ø1/8" (0.125) / 3mm		Ø3/16" (0.1875)		Ø1/4" (0.250) / 6mm		Ø5/16" (0.3125)		Ø3/8" (0.375)	
Material	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"

<sup>\*</sup>SFM Surface feet per minute

**† 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 **Ramp Down:** Feed Rate IPM / # of flutes

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) Tool Reference #'s Diameter Square End 46269 1/8" 1/8" 46270 46271 3/16" 46272 1/4" 46273 3/16" 46274 1/4" 46275 1/4" 5/16" 46276 46277 3/8" 46278 3/8" 46279 3/8" 46562 1/8" 46564 1/8" 46566 1/4" 48442 3mm 48444 6mm 48460 3/16" 48461 1/8" 48462 1/4" Ball End 46030 1/8" 46032 1/4"

<sup>\*\*</sup>IPM Inches per minute