

3 Flute Solid Carbide Spiral Flute Roughing Router Bits

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

Tool No.		Diameter	MDF		Veneered Plywood		Wood	
Up-Cut	Down-Cut		Feed Rate IPM*	Chip Load Per Tooth	Feed Rate IPM*	Chip Load Per Tooth	Feed Rate IPM*	Chip Load Per Tooth
46141	—	1/4" (0.25)	300" - 350"	0.005" - 0.006"	380" - 450"	0.007" - 0.008"	350" - 400"	0.006" - 0.007"
59420	—	3/8" (0.375)	650" - 760"	0.012" - 0.014"	760" - 900"	0.014" - 0.016"	700" - 800"	0.013" - 0.015"
46129	46223	3/8" (0.375)	650" - 760"	0.012" - 0.014"	760" - 900"	0.014" - 0.016"	700" - 800"	0.013" - 0.015"
46124	46224	1/2" (0.50)	760" - 900"	0.014" - 0.016"	900" - 1000"	0.016" - 0.018"	800" - 900"	0.015" - 0.017"
46126	46226	1/2" (0.50)	900" - 1000"	0.016" - 0.018"	800" - 900"	0.015" - 0.017"	750" - 870"	0.014" - 0.016"

* IPM Inches 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 **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.

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