





## Solid Carbide Spektra™ Extreme Tool Life Coated Mortise Compression Spiral Router Bits

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

## 2 Flute

Diameter	Wood			MDF/Laminate			Plywood			Plastic		
	Feed Rate IPM *	Chip Load Per Tooth	Ramp Down	Feed Rate IPM *	Chip Load Per Tooth	Ramp Down	Feed Rate IPM *	Chip Load Per Tooth	Ramp Down	Feed Rate IPM *	Chip Load Per Tooth	Ramp Down
6mm	110"	.0031"	55"	220"	.0061"	110"	110"	.0031"	55"	110"	.0031"	55"
1/4"	110"	.0031"	55"	220"	.0061"	110"	110"	.0031"	55"	110"	.0031"	55"
3/8"	200"	.0056"	100"	400"	.0111"	200"	200"	.0056"	100"	200"	.0056"	100"
12mm	280"	.0077"	140"	400"	.0111"	200"	280"	.0077"	140"	280"	.0077"	140"
1/2"	280"	.0077"	140"	400"	.0111"	200"	280"	.0077"	140"	280"	.0077"	140"

## 3 Flute

Diameter	Wood			MDF/Laminate			Plywood			Plastic		
	Feed Rate IPM *	Chip Load Per Tooth	Ramp Down	Feed Rate IPM *	Chip Load Per Tooth	Ramp Down	Feed Rate IPM *	Chip Load Per Tooth	Ramp Down	Feed Rate IPM *	Chip Load Per Tooth	Ramp Down
1/8"	80"	.0014"	27"	160"	.0030"	54"	80"	.0014"	27"	80"	.0014"	27"
1/4"	165"	.0031"	55"	330"	.0061"	110"	165"	.0031"	55"	165"	.0031"	55"
3/8"	300"	.0056"	100"	400"	.0074"	133"	300"	.0056"	100"	300"	.0056"	100"

\*IPM: Inches Per Minute

† 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%

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

46019-K 1/2" 46021-K 3/8" 46023-K 1/2" 46025-K 6mm 46027-K 12mm 46029-K 1/4" 46033-K 1/4" 46034-K 1/2" 46350-K 1/4" 46352-K 3/8" 46354-K 1/2" 46367-K 3/8" 46395-K 3/8" 3 Flute Dia. 46016-K 1/4" 46018-K 1/4" 46020-K 3/8" 46398-K 1/8"

Tool Reference #'s

Dia.

2 Flute