



**Solid Carbide Spektra™ Extreme Tool Life Coated
Solid Carbide Plastic Cutting Spiral Single 'O' Flute Router Bits**
Operating RPM: 18,000

Diameter	IPM at 18,000 RPM (Inches Per Minute)	Spindle Speed SFM (Surface Feet Per Minute)	Chip Load Per Tooth
1/16" (0.0625)	35 - 70	500 - 1,200	0.002" - 0.004"
1/8" (0.125)	70 - 110	500 - 1,200	0.004" - 0.006"
3/16" (0.1875)	110 - 145	500 - 1,200	0.006" - 0.008"
1/4" (0.250)	145 - 220	500 - 1,200	0.008" - 0.012"

Tool Reference #'s		
Up-Cut	Down-Cut	Dia.
51404-K	—	1/4"
51405-K	—	1/4"
51410-K	—	1/8"
51411-K	—	1/8"
51417-K	—	3/16"
51441-K	—	1/16"
51446-K	—	1/8"

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**: RPM x # of flutes x chip load

To find **Chip Load**: IPM / (RPM x # of Flutes)

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%

Disclaimer: These values are based on test results using 18,000 RPM. Your results may vary. It is important to understand that these values are only recommendations.