



Solid Carbide Plastic Cutting Spiral Double 'O' Flute Router Bits

Diameter	IPM at 18,000 RPM <small>(Inches Per Minute)</small>	Spindle Speed SFM <small>(Surface Feet Per Minute)</small>	Chip Load Per Tooth
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"
3/8" (0.375)	200 - 290	500 - 1,200	0.011" - 0.016"

Tool Reference #'s		
Up-Cut	Down-Cut	Dia.
51761	51781	1/8"
51762	51782	1/8"
51763	—	3/16"
51765	—	1/4"
51766	—	1/8"
51767	—	1/4"
51768	51784	1/4"
51769	—	1/4"
51780	—	3/8"

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 IPM**: RPM x # of flutes x chip load

To find **Chip Load**: Feed Rate 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%