



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

Operating RPM: 18,000 / Depth of Cut: 1 x Tool Diameter +

Diameter Single Flute	Feed Rate IPM*	Chip Load Per Tooth	Ramp Down			
1/8" (0.125)	50"	0.003"	50"	То	Tool Reference #'s	
170 (0.123)	50	0.003		Tool No.	Flutes	Dia.
3/16" (0.1875)	60"	0.003"	60"	43500	1	1/8"
1/4" (0.250)	70"	0.004"	70"	43504 43508	1	3/16" 1/4"
				43512	1	1/4"
2 Flute				43514	1	1/4"
21100	1			43600	2	1/8"
1/8" (0.125)	110	0.003"	55"	43604	2	3/16"
3/16" (0.1875)	120	0.003"	60"	43607	2	1/4"
3/10 (0.10/3)	120	0.003	00	43608	2	1/4"
1/4" (0.250)	130	0.004"	65"	43616	2	1/2"
1/2" (0.500)	220	0.006"	110"			

* 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 $\ensuremath{\text{RPM:}}$ (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.