Amana Tool®

INDUSTRIAL

ZrN Coated Solid Carbide Aluminum Cutting Spiral Single 'O' Flute Router Bits

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	600 - 1,000	0.002" - 0.004"
1/8" (0.125)	35 - 70	600 - 1,000	0.002" - 0.004"
3/16" (0.1875)	55 - 110	600 - 1,000	0.003" - 0.006"
1/4" (0.250)	55 - 110	600 - 1,000	0.003" - 0.006"

Tool Reference #'s		
Up-Cut	Down-Cut	Dia.
51402-Z	—	1/4"
51406-Z	—	1/8"
51408-Z	—	3/16"
51454-Z	—	1/8"
51470-Z	—	1/16"
51474-Z	—	1/8"
51478-Z	—	3/16"
51479-Z	—	1/4"
51480-Z	—	1/4"
51486-Z	—	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 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%

Disclaimer: It is important to understand that these values are only recommendations.