



**ZrN Coated Solid Carbide Aluminum Cutting Spiral  
Single 'O' Flute Router Bits**  
CNC Operating Spindle Speed: 18,000 RPM / Depth of Cut: 1 x Tool Diameter †

<b>Diameter</b>	<b>IPM at 18,000 RPM</b> (Inches Per Minute)	<b>Spindle Speed SFM</b> (Surface Feet Per Minute)	<b>Chip Load Per Tooth</b>
<b>1/16" (0.0625)</b>	35" - 70"	600 - 1,000	0.002" - 0.004"
<b>1/8" (0.125)</b>	35" - 70"	600 - 1,000	0.002" - 0.004"
<b>3/16" (0.1875)</b>	55" - 110"	600 - 1,000	0.003" - 0.006"
<b>1/4" (0.250)</b>	55" - 110"	600 - 1,000	0.003" - 0.006"

Tool Reference #'s		
Up-Cut	Down-Cut	Dia.
51373-Z	—	1/4"
51377-Z	—	1/4"
51402-Z	51502-Z	1/4"
51406-Z	—	1/8"
51408-Z	51508-Z	3/16"
51454-Z	—	1/8"
51456-Z	—	3/16"
51459-Z	—	1/8"
51470-Z	—	1/16"
51471-Z	—	1/8"
51474-Z	—	1/8"
51477-Z	—	3/16"
51478-Z	—	3/16"
51479-Z	—	1/4"
51480-Z	—	1/4"
51481-Z	—	1/4"
51486-Z	—	1/8"

† **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

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

© Copyright Amana Tool® All Rights Reserved