



## Soft Aluminum Cutting ZrN Coated Router Bits

	3/16" (0.1875")		1/4" (0.250")	
	IPM*	Chip Load Per Tooth (Based on 13,000 RPM)	IPM*	Chip Load Per Tooth (Based on 10,000 RPM)
Acrylonitrile-Butadiene-Styrene (ABS), Aluminum Sheet (3003 grade) Brass, Bronze, Copper, Gold, Silver, Polycarbonate (Lexan™)	90"	0.007"	80"	0.008"

\* IPM Inches per minute

Tool Reference #'s	
Tool No.	Dia.
51450	3/16"
51452	1/4"

Simple Machining Calculations:

To find **RPM**:  $(SFM \times 3.82) / \text{diameter of tool}$

To find **SFM**:  $0.262 \times \text{diameter of tool} \times \text{RPM}$

To find **Feed Rate IPM**:  $\text{RPM} \times \# \text{ of flutes} \times \text{chip load}$

To find **Chip Load**:  $\text{Feed Rate IPM} / (\text{RPM} \times \# \text{ of Flutes})$

**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. Your results may vary.  
It is important to understand that these values are only recommendations.