

Solid Carbide ZrN Coated Square Aluminum Cutting End Mill Router Bits
Running CNC Parameters

2 Flute

Diameter	1/4"	
Aluminum, forged casted Magnesium, Zinc	18,000 RPM	
	Feed Rate IPM*	Chip Load Per Tooth
	55 IPM	0.002

3 Flute

Diameter	1/8"		3/16"		1/4"		3/8"		1/2"	
Aluminum, forged casted Magnesium, Zinc	18,400 RPM		12,200 RPM		9,200 RPM		6,100 RPM		4,600 RPM	
	Feed Rate IPM*	Chip Load Per Tooth	Feed Rate IPM*	Chip Load Per Tooth	Feed Rate IPM*	Chip Load Per Tooth	Feed Rate IPM*	Chip Load Per Tooth	Feed Rate IPM*	Chip Load Per Tooth
	25 IPM	0.00045	26 IPM	0.00071	27 IPM	0.00098	29 IPM	0.00158	30 IPM	0.00217

Slotting, 1 Xs Dia.

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.

Tool Reference #'s	
Diameter	Tool #
1/8"	51862-Z
3/16"	51864-Z
1/4"	51866-Z
1/4"	51624
3/8"	51868-Z
1/2"	51870-Z