

6 Flute Solid Carbide ZrN Coated CNC Honeycomb Hogger Router Bits

CNC Operating Spindle Speed: 18,000 RPM / Depth of Cut: 1 x Tool Diameter †

Material	Tool Reference #'s	40304			46306 / 40305		46305		46309	
	Diameter	Ø1/8" (0.125)			Ø1/4" (0.250)		Ø3/8" (0.375)		Ø1/2" (0.500)	
	Spindle Speed SFM*	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	
Aluminum Honeycomb	800 - 1,200	320" - 540"	0.003" - 0.005"	650" - 1000"	0.006" - 0.009"	750" - 1100"	0.007" - 0.010"	650" - 1000"	0.006" - 0.009"	
Aramid Honeycomb	1,200 - 1,600	210" - 430"	0.002" - 0.004"	320" - 650"	0.003" - 0.006"	550" - 900"	0.005" - 0.008"	1000" - 1400"	0.009" - 0.013"	
Carbon Laminates (Nomex, Kevlar)	1,100 - 1,400	210" - 430"	0.002" - 0.004"	320" - 650"	0.003" - 0.006"	550" - 900"	0.005" - 0.008"	320" - 650"	0.003" - 0.006"	
Tedlar	1,400 - 1,600	110" - 320"	0.001" - 0.003"	110" - 430"	0.001" - 0.004"	210" - 540"	0.002" - 0.005"	110" - 430"	0.001" - 0.004"	

*SFM Surface feet per minute

**IPM Inches per minute

† **Depth of Cut:** 1 x D Use recommended feed rate
 2 x D Reduce feed rate by 25%
 3 x D Reduce feed rate 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.