

In-Tech™ Insert Carbide Single Flute V-Groove Router Bit

CNC Operating Spindle Speed: 11,000 - 16,000 RPM / Depth of Cut: 0.05"

Tool No.	Angle a°	Flutes	Plastic				Aluminum (Engraving)				Wood			
			RPM	Feed Rate *IPM	Chip Load Per Tooth	Ramp Down *IPM	RPM	Feed Rate *IPM	Chip Load Per Tooth	Ramp Down *IPM	RPM	Feed Rate *IPM	Chip Load Per Tooth	Ramp Down *IPM
RC-45711	90°	1	11,000	50"	.0045"	25"	16,000	12"	.0007"	6"	18,000	40"	.0022"	20"
RC-45712	90°	1	11,000	50"	.0045"	25"	16,000	12"	.0007"	6"	18,000	40"	.0022"	20"

*IPM: Inches Per Minute

Tool No.	Angle a°	Flutes	Plastic				Aluminum (Engraving)				Wood			
			RPM	Feed Rate **MMPM	Chip Load Per Tooth	Ramp Down **MMPM	RPM	Feed Rate **MMPM	Chip Load Per Tooth	Ramp Down **MMPM	RPM	Feed Rate **MMPM	Chip Load Per Tooth	Ramp Down **MMPM
RC-45711-M	90°	1	11,000	1270mm	.1143mm	635mm	16,000	300mm	.01875mm	150mm	18,000	1016mm	.05588"	508mm

*MMPM: Millimeters Per Minute

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.