Amana Tool®

INDUSTRIAL DIAMOND TECHNOLOGY

Polycrystalline Diamond (PCD) CNC Spoilboard Router Bit
Speed and Feed Chart

Tool No. DRB-440			Surface Cutting Speed		Chip Load Per Tooth		RPM		Feed Rate	
Material	**Diameter** Inch/mm	**No. Teeth**	**From** Inch (mm)/min	**To** Inch (mm)/min	**From** Inch (mm)/min	**To** Inch (mm)/min	**From**	**To**	**From** Inch (mm)/min	**To** Inch (mm)/min
Aluminum, Bronze, Copper	1-1/2" (38.1mm)	2	19" (500mm)	78" (2000mm)	.006" (0.15mm)	.001" (0.25mm)	4,000	16,500	49" (1,254mm)	329" (8,359mm)
Wood	1-1/2" (38.1mm)	2	—	—	.006" (0.15mm)	.001" (0.25mm)	12,500	14,500	150" (3,810mm)	285" (7,250mm)

Maximum RPM: 14,500

Correction factor for chip load:
0.8 = MDF with or without Coating
1.1 = Chipboard with or without Coating
0.7 = Veneer across grain

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:** RPM x # of flutes x chip load

Warning: Must Use Ramping Down Technique