Amana Tool®

INDUSTRIAL

SPEKTRA™ EXTREME TOOL LIFE COATING

Mirror FINISH

Solid Carbide Spektra™ Extreme Tool Life Coated
Solid Carbide Plastic Cutting Spiral Single '0' Flute Router Bits

Operating RPM: 18,000 / **Depth of Cut:** 1 x Tool Diameter †

Diameter	IPM at 18,000 RPM (Inches Per Minute)	Spindle Speed SFM (Surface Feet Per Minute)	Chip Load Per Tooth
1/32" (0.03125)	35 - 70	500 - 1,200	0.002" - 0.004"
1mm	35 - 70	500 - 1,200	0.002" - 0.004"
1.1mm	35 - 70	500 - 1,200	0.002" - 0.004"
1.2mm	35 - 70	500 - 1,200	0.002" - 0.004"
1.4mm	35 - 70	500 - 1,200	0.002" - 0.004"
1.5mm	35 - 70	500 - 1,200	0.002" - 0.004"
1.6mm	35 - 70	500 - 1,200	0.002" - 0.004"
1.8mm	35 - 70	500 - 1,200	0.002" - 0.004"
1/16" (0.0625)	35 - 70	500 - 1,200	0.002" - 0.004"
1/8" (0.125)	70 - 110	500 - 1,200	0.004" - 0.006"
3/16" (0.1875)	110 - 145	500 - 1,200	0.006" - 0.008"
1/4" (0.250)	145 - 220	500 - 1,200	0.008" - 0.012"
3/8" (0.375)	200 - 290	500 - 1,200	0.011" - 0.016"
1/2" (0.500)	270 - 360	500 - 1,200	0.015" - 0.020"

Tool Reference #'s		
Up-Cut	Down-Cut	Dia.
51390-K	—	1mm
51391-K	—	1.5mm
51392-K	—	1/4"
51394-K	—	1.1mm
51395-K	—	1.2mm
51396-K	—	1.4mm
51397-K	—	1.6mm
51398-K	—	1.8mm
51404-K	51504-K	1/4"
51405-K	51505-K	1/4"
51407-K	51507-K	1/4"
51410-K	51510-K	1/8"
51411-K	51511-K	1/8"
51412-K	—	3/16"
51413-K	51513-K	1/4"
51414-K	—	3/8"
51415-K	51515-K	1/16"
51416-K	—	1/8"
51417-K	51517-K	3/16"
51418-K	—	3/16"
51419-K	—	1/4"
51421-K	51524-K	1/4"
51425-K	—	1/4"
51427-K	—	3/8"
51428-K	—	1/2"
51435-K	—	1/8"
51437-K	—	1/8"
51441-K	—	1/16"
51442-K	—	3/16"
51444-K	—	1/4"
51445-K	—	1/8"
51446-K	—	1/8"
51646-K	—	1/4"
51649-K	—	1/32"
51810-K	—	1/4"
57362-K	—	1/4"

† 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.

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