Amana Tool®

INDUSTRIAL

1 & 2 Flute High Speed Steel (HSS) Plastic Cutting Straight 'O' Flute Router Bits

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

Tool No. / Diameter	Max RPM	Feed Rate IPM*	Chip Load Per Tooth
Single Flute			
HSS1490 / 1/16" (0.0625)	18,000	70" - 110"	0.004" - 0.006"
HSS1492 / 3/32" (0.09375)	18,000	70" - 110"	0.004" - 0.006"
HSS1500 / 1/8" (0.125)	18,000	70" - 110"	0.004" - 0.006"
HSS1501 / 1/8" (0.125)	12,500	50" - 75"	0.004" - 0.006"
HSS1502 / 3/16" (0.1875)	18,000	110" - 145"	0.006" - 0.008"
HSS1509 / 3/16" (0.1875)	18,000	110" - 145"	0.006" - 0.008"
HSS1503 / 3/16" (0.1875)	12,500	75" - 100"	0.006" - 0.008"
HSS1504 / 1/4" (0.250)	18,000	110" - 145"	0.006" - 0.008"
HSS1505 / 1/4" (0.250)	12,500	75" - 100"	0.006" - 0.008"
HSS1506 / 1/4" (0.250)	18,000	110" - 145"	0.006" - 0.008"
HSS1508 / 1/4" (0.250)	18,000	110" - 145"	0.006" - 0.008"
HSS1507 / 3/8" (0.375)	18,000	120" - 160"	0.007" - 0.009"
2 Flute			
HSS1600 / 3/16" (0.1875)	18,000	70" - 150"	0.002" - 0.004"
HSS1601 / 1/4" (0.250)	18,000	70" - 150"	0.002" - 0.004"
HSS1602 / 1/4" (0.250)	12,500	50" - 100"	0.002" - 0.004"
HSS1603 / 1/4" (0.250)	12,500	50" - 100"	0.002" - 0.004"
HSS1604 / 1/4" (0.250)	18,000	70" - 150"	0.002" - 0.004"
HSS1605 / 1/4" (0.250)	12,500	50" - 100"	0.002" - 0.004"
HSS1606 / 3/8" (0.375)	18,000	110" - 180"	0.003" - 0.005"
HSS1607 / 3/8" (0.375)	12,500	75" - 130"	0.003" - 0.005"

*** 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.

© Copyright Amana Tool® All Rights Reserved