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** | | | |
| **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" |
| **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" |
| **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 chip load
2 x D Reduce chip load by 25%
3 x D Reduce chip load 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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