

Solid Carbide Spiral Plunge 2 & 3 Flute Router Bits

Operating RPM: 18,000

2 Flute

| Tool No. | | Diameter | Wood/Plywood | | | MDF/Laminate | | |
|----------|----------|----------|--------------|---------------------|-------------|--------------|---------------------|-------------|
| Up-Cut | Down-Cut | | * Feed Rate | Chip Load Per Tooth | * Ramp Down | * Feed Rate | Chip Load Per Tooth | * Ramp Down |
| — | 46229 | 1/32" | 30 | .0008" | 15 | 60 | .0015" | 30 |
| — | 46231 | 3/64" | 40 | .0012" | 20 | 80 | .0023" | 40 |
| — | 46237 | 1/16" | 50 | .0016" | 25 | 100 | .0031" | 50 |
| — | 46239 | 3/32" | 80 | .0023" | 40 | 160 | .0046" | 80 |
| — | 46235 | 7/64" | 80 | .0023" | 40 | 160 | .0046" | 80 |
| 46127 | 46227 | 1/8" | 60 | .0016" | 30 | 110 | .0031" | 55 |
| 46100 | 46200 | 1/8" | 60 | .0016" | 30 | 110 | .0031" | 55 |
| 46333 | 46433 | 1/8" | 60 | .0016" | 30 | 110 | .0031" | 55 |
| 46125 | 46225 | 1/8" | 60 | .0016" | 30 | 110 | .0031" | 55 |
| 46310 | 46410 | 5/32" | 70 | .0019" | 35 | 140 | .0039" | 70 |
| 46101 | 46201 | 3/16" | 80 | .0024" | 40 | 160 | .0047" | 80 |
| 46131 | 46331 | 3/16" | 80 | .0024" | 40 | 160 | .0047" | 80 |
| 46314 | 46414 | 7/32" | 100 | .0028" | 50 | 190 | .0055" | 95 |
| 46337 | 46437 | 1/4" | 60 | .0016" | 30 | 110 | .0031" | 55 |
| 46338 | 46438 | 1/4" | 60 | .0016" | 30 | 110 | .0031" | 55 |
| 46102 | 46202 | 1/4" | 60 | .0016" | 30 | 110 | .0031" | 55 |
| 46102-S | 46202-S | 1/4" | 60 | .0016" | 30 | 110 | .0031" | 55 |
| 46315 | 46415 | 1/4" | 60 | .0016" | 30 | 110 | .0031" | 55 |
| 46321 | 46421 | 1/4" | 60 | .0016" | 30 | 110 | .0031" | 55 |
| 46317 | 46417 | 9/32" | 170 | .0048" | 85 | 290 | .0081" | 145 |
| 46117 | 46217 | 9/32" | 170 | .0048" | 85 | 290 | .0081" | 145 |
| 46325 | 46422 | 5/16" | 190 | .0054" | 95 | 320 | .0090" | 160 |
| 46119 | 46219 | 5/16" | 190 | .0054" | 95 | 320 | .0090" | 160 |
| 46318 | — | 5/16" | 190 | .0054" | 95 | 320 | .0090" | 160 |
| 46339 | 46439 | 3/8" | 230 | .0064" | 115 | 390 | .0108" | 195 |
| 46103 | 46203 | 3/8" | 230 | .0064" | 115 | 390 | .0108" | 195 |
| 46320 | 46420 | 3/8" | 230 | .0064" | 115 | 390 | .0108" | 195 |
| 46320 | 46420 | 3/8" | 230 | .0064" | 115 | 390 | .0108" | 195 |
| 46323 | 46423 | 3/8" | 230 | .0064" | 115 | 390 | .0108" | 195 |
| 46104 | 46204 | 3/8" | 230 | .0064" | 115 | 390 | .0108" | 195 |
| 46335 | 46435 | 7/16" | 270 | .0075" | 135 | 450 | .0125" | 225 |
| 46210 | 46447 | 1/2" | 200 | .0057" | 100 | 350 | .0096" | 175 |
| 46336 | 46436 | 1/2" | 200 | .0057" | 100 | 350 | .0096" | 175 |
| 46106 | 46206 | 1/2" | 200 | .0057" | 100 | 350 | .0096" | 175 |
| 46107 | 46207 | 1/2" | 200 | .0057" | 100 | 350 | .0096" | 175 |
| 46329 | 46429 | 1/2" | 200 | .0057" | 100 | 350 | .0096" | 175 |
| 46108 | 46208 | 5/8" | 250 | .0072" | 125 | 430 | .0120" | 215 |
| 46121 | — | 5/8" | 250 | .0072" | 125 | 430 | .0120" | 215 |

3 Flute

| | | | | | | | | |
|-------|-------|------|-----|--------|-----|-----|--------|-----|
| 46114 | 46214 | 3/8" | 340 | .0064" | 170 | 600 | .0108" | 300 |
| 46116 | 46216 | 1/2" | 300 | .0057" | 150 | 500 | .0096" | 250 |
| 46118 | 46218 | 1/2" | 300 | .0057" | 150 | 500 | .0096" | 250 |

Simple Machining Calculations:

To find **RPM:**
 $(SFM \times 3.82) / \text{diameter of tool}$

To find **SFM:**
 $0.262 \times \text{diameter of tool} \times \text{RPM}$

To find **Feed Rate IPM:**
 $\text{RPM} \times \# \text{ of flutes} \times \text{chip load}$

To find **Chip Load:**
 $\text{Feed Rate IPM} / (\text{RPM} \times \# \text{ of Flutes})$

To find **Ramp Down:**
 $\text{Feed Rate} / 2$

* IPM: Inches Per Minute