| Tool No. | $\underset{\mathrm{a}^{\circ}}{\text { Angle }}$ | Flutes | RPM | Hardwood |  |  | Softwood |  |  | Plywood/Chipboard |  |  | MDF |  |  | Plastic |  |  | Foam |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | *Feed Rate | Chip Load <br> Per Tooth | *Ramp Down | * Feed Rate | Chip Load <br> Per Tooth | *Ramp Down | *Feed Rate | Chip Load <br> Per Tooth | *Ramp Down | *Feed Rate | $\begin{array}{\|l\|} \hline \text { Chip Load } \\ \text { Per Tooth } \end{array}$ | *Ramp Down | *Feed Rate | Chip Load <br> Per Tooth | *Ramp Down | *Feed Rate | Chip Load <br> Per Tooth | *Ramp Down |
| RC-1040 | $40^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 90 | .0047" | 45 | 40 | .0024" | 20 | 90 | .0047" | 45 |
| RC-1045 | $45^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 90 | .0047" | 45 | 40 | .0024" | 20 | 90 | .0047" | 45 |
| RC-1145 | $45^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 90 | .0047" | 45 | 40 | .0024" | 20 | 90 | .0047" | 45 |
| RC-1049 | $45^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 90 | .0047" | 45 | 40 | .0024" | 20 | 90 | .0047" | 45 |
| RC-1031 | $45^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 80 | .0047" | 40 | 40 | .0024" | 20 | 80 | .0047" | 40 |
| RC-1047 | $46^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 90 | .0047" | 45 | 40 | .0024" | 20 | 90 | .0047" | 45 |
| RC-1046 | $50^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 90 | .0047" | 45 | 40 | .0024" | 20 | 90 | .0047" | 45 |
| RC-1108 | $60^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 90 | .0047" | 45 | 40 | .0024" | 20 | 90 | .0047" | 45 |
| RC-1148 | $60^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 90 | .0047" | 45 | 40 | .0024" | 20 | 90 | .0047" | 45 |
| RC-1048 | $70^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 90 | .0047" | 45 | 40 | .0024" | 20 | 90 | .0047" | 45 |
| RC-1072 | $72^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 90 | .0047" | 45 | 40 | .0024" | 20 | 90 | .0047" | 45 |
| RC-1102 | $90^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 90 | .0047" | 45 | 40 | .0024" | 20 | 90 | .0047" | 45 |
| RC-1142 | $90^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 90 | .0047" | 45 | 40 | .0024" | 20 | 90 | .0047" | 45 |
| RC-1030 | $90^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 80 | .0047" | 40 | 40 | .0024" | 20 | 80 | .0047" | 40 |
| RC-1034 | $90^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 80 | .0047" | 40 | 40 | .0024" | 20 | 80 | .0047" | 40 |
| RC-1100 | $91^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 90 | .0047" | 45 | 40 | .0024" | 20 | 90 | .0047" | 45 |
| RC-1140 | $91^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 90 | .0047" | 45 | 40 | .0024" | 20 | 90 | .0047" | 45 |
| RC-1028 | $91^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 80 | .0047" | 40 | 40 | .0024" | 20 | 80 | .0047" | 40 |
| RC-1103 | $100^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 90 | .0047" | 45 | 40 | .0024" | 20 | 90 | .0047" | 45 |
| RC-1105 | $110^{\circ}$ | 1 | 18,000 | 40 | .0024" | 20 | 40 | .0024" | 20 | 40 | .0024" | 20 | 90 | .0047" | 45 | 40 | .0024" | 20 | 90 | .0047" | 45 |
| RC-1104 | $120^{\circ}$ | 2 | 18,000 | 90 | .0024" | 45 | 90 | .0024" | 45 | 90 | .0024" | 45 | 180 | .0048" | 90 | 90 | .0024" | 45 | 180 | .0048" | 90 |
| RC-1029 | $120^{\circ}$ | 2 | 15,000 | 70 | .0024" | 35 | 70 | .0024" | 35 | 70 | .0024" | 35 | 150 | .0047" | 75 | 70 | .0024" | 35 | 140 | .0047" | 70 |
| RC-1107 | $130^{\circ}$ | 2 | 18,000 | 90 | .0024" | 45 | 90 | .0024" | 45 | 90 | .0024" | 45 | 180 | .0048" | 90 | 90 | .0024" | 45 | 180 | .0048" | 90 |
| RC-1110 | $140^{\circ}$ | 2 | 18,000 | 90 | .0024" | 45 | 90 | .0024" | 45 | 90 | .0024" | 45 | 180 | .0048" | 90 | 90 | .0024" | 45 | 180 | .0048" | 90 |
| RC-1111 | $140^{\circ}$ | 2 | 16,000 | 80 | .0024" | 40 | 80 | .0024" | 40 | 80 | .0024" | 40 | 160 | .0048" | 80 | 80 | .0024" | 40 | 160 | .0048" | 80 |
| RC-1106 | $150^{\circ}$ | 2 | 18,000 | 90 | .0024" | 45 | 90 | .0024" | 45 | 90 | .0024" | 45 | 180 | .0048" | 90 | 90 | .0024" | 45 | 180 | .0048" | 90 |
| RC-1027 | $150^{\circ}$ | 2 | 13,000 | 60 | .0024" | 30 | 60 | .0024" | 30 | 60 | .0024" | 30 | 120 | .0047" | 60 | 60 | .0024" | 30 | 120 | .0047" | 60 |
| RC-1109 | $160^{\circ}$ | 2 | 18,000 | 90 | .0024" | 45 | 90 | .0024" | 45 | 90 | .0024" | 45 | 180 | .0048" | 90 | 90 | .0024" | 45 | 180 | .0048" | 90 |

*IPM: Inches Per Minute
Ramp Down is half the Feed Rate.

Simple Machining Calculations:
To find RPM: (SFM x 3.82) / diameter of tool
To find SFM: $0.262 \times$ diameter of tool $\times$ RPM

To find Feed Rate IPM: RPM x \# of flutes x chip load To find Chip Load: Feed Rate IPM / (RPM x \# of Flutes)

