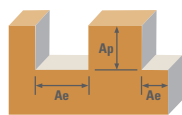


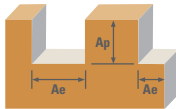
2 Flute: Square, Ball



| M2, M2B 3xD Fractional | Hardness | Profile | Ae x D ₁ | | Ap x D ₁ | Vc (SFM) | | Diameter (D ₁) (inch) | | | | | |
|------------------------------|---|---------|---------------------|-----------|---------------------|-------------|---------|--------------------------------------|---------|---------|---------|---------|---------|
| | | | ≤ .10 | ≤ .25 | | | | ≤ 2 | 0.005 | 0.015 | 0.031 | 0.062 | 0.093 |
| P | CARBON STEELS 1018, 1040, 1080, 1090, 10L50, 1140, 1212, 12L15, 1525, 1536 | Profile | ≤ .10 | ≤ .25 | ≤ 2 | 365 | RPM | 278860 | 89378 | 44689 | 22309 | 14865 | 11619 |
| | | | | | | (292-438) | Fz | 0.000019 | 0.00006 | 0.00012 | 0.00024 | 0.00036 | 0.00047 |
| | | Slot | 1 | ≤ .15 | ≤ .35 | 290 | RPM | 221560 | 71013 | 35506 | 17725 | 11810 | 9232 |
| | | | | | | (232-348) | Fz | 0.000019 | 0.00006 | 0.00012 | 0.00024 | 0.00036 | 0.00047 |
| | | Profile | ≤ .10 | ≤ .25 | ≤ 2 | 210 | RPM | 160440 | 51423 | 25712 | 12835 | 8552 | 6685 |
| | | | | | | (168-252) | Fz | 0.000017 | 0.00005 | 0.00011 | 0.00022 | 0.00032 | 0.00042 |
| Slot | 1 | ≤ .15 | ≤ .35 | 165 | RPM | 126060 | 40404 | 20202 | 10085 | 6720 | 5253 | | |
| | | | | (132-198) | Fz | 0.000017 | 0.00005 | 0.00011 | 0.00022 | 0.00032 | 0.00042 | | |
| Profile | ≤ .10 | ≤ .25 | ≤ 2 | 175 | RPM | 133700 | 42853 | 21426 | 10696 | 7127 | 5571 | | |
| | | | | (140-210) | Fz | 0.000014 | 0.00004 | 0.00009 | 0.00018 | 0.00026 | 0.00034 | | |
| Slot | 1 | ≤ .15 | ≤ .35 | 140 | RPM | 106960 | 34282 | 17141 | 8557 | 5701 | 4457 | | |
| | | | | (112-168) | Fz | 0.000014 | 0.00004 | 0.00009 | 0.00018 | 0.00026 | 0.00034 | | |
| Profile | ≤ .10 | ≤ .25 | ≤ 2 | 305 | RPM | 233020 | 74686 | 37343 | 18642 | 12421 | 9709 | | |
| | | | | (244-366) | Fz | 0.000019 | 0.00006 | 0.00012 | 0.00024 | 0.00037 | 0.00047 | | |
| Slot | 1 | ≤ .15 | ≤ .35 | 245 | RPM | 187180 | 59994 | 29997 | 14974 | 9978 | 7799 | | |
| | | | | (196-294) | Fz | 0.000019 | 0.00006 | 0.00012 | 0.00024 | 0.00037 | 0.00047 | | |
| Profile | ≤ .10 | ≤ .25 | ≤ 2 | 340 | RPM | 259760 | 83256 | 41628 | 20781 | 13846 | 10823 | | |
| | | | | (272-408) | Fz | 0.000019 | 0.00006 | 0.00012 | 0.00024 | 0.00036 | 0.00047 | | |
| Slot | 1 | ≤ .15 | ≤ .35 | 270 | RPM | 206280 | 66115 | 33058 | 16502 | 10996 | 8595 | | |
| | | | | (216-324) | Fz | 0.000019 | 0.00006 | 0.00012 | 0.00024 | 0.00036 | 0.00047 | | |
| Profile | ≤ .10 | ≤ .25 | ≤ 2 | 235 | RPM | 179540 | 57545 | 28772 | 14363 | 9570 | 7481 | | |
| | | | | (188-282) | Fz | 0.000017 | 0.00005 | 0.00011 | 0.00022 | 0.00032 | 0.00042 | | |
| Slot | 1 | ≤ .15 | ≤ .35 | 185 | RPM | 141340 | 45301 | 22651 | 11307 | 7534 | 5889 | | |
| | | | | (148-222) | Fz | 0.000017 | 0.00005 | 0.00011 | 0.00022 | 0.00032 | 0.00042 | | |
| Profile | ≤ .10 | ≤ .25 | ≤ 2 | 215 | RPM | 164260 | 52647 | 26324 | 13141 | 8756 | 6844 | | |
| | | | | (172-258) | Fz | 0.000012 | 0.00004 | 0.00008 | 0.00015 | 0.00023 | 0.00029 | | |
| Slot | 1 | ≤ .15 | ≤ .35 | 170 | RPM | 129880 | 41628 | 20814 | 10390 | 6923 | 5412 | | |
| | | | | (136-204) | Fz | 0.000012 | 0.00004 | 0.00008 | 0.00015 | 0.00023 | 0.00029 | | |

continued on next page

FRACTIONAL 2 Flute: Square, Ball

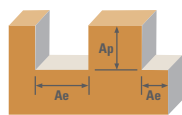


| M2, M2B 3xD Fractional | Hardness | Profile | Ae x D ₁ | | Ap x D ₁ | Vc (SFM) | | Diameter (D ₁) (inch) | | | | | |
|---|--|---------|---------------------|-------|---------------------|-------------|------------|--------------------------------------|---------|---------|---------|---------|---------|
| | | | ≤ .10 | ≤ .25 | | | | ≤ 2 | 0.005 | 0.015 | 0.031 | 0.062 | 0.093 |
| S | SUPER ALLOYS (NICKEL, COBALT, IRON BASE) Inconel 601, 617, 625, Incoloy, Monel 400 | Profile | ≤ .10 | ≤ .25 | ≤ 2 | 60 | RPM | 45840 | 14692 | 7346 | 3667 | 2443 | 1910 |
| | | | | | | (48-72) | Fz | 0.000011 | 0.00003 | 0.00007 | 0.00014 | 0.00020 | 0.00026 |
| | | | | | | | Feed (ipm) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| | | Slot | 1 | ≤ .15 | ≤ .35 | 45 | RPM | 34380 | 11019 | 5510 | 2750 | 1833 | 1433 |
| | | | | | | (36-54) | Fz | 0.000011 | 0.00003 | 0.00007 | 0.00014 | 0.00020 | 0.00026 |
| | | | | | | | Feed (ipm) | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| | SUPER ALLOYS (NICKEL, COBALT, IRON BASE) Inconel 718, X-750, Incoloy, Waspaloy, Hastelloy, Rene | Profile | ≤ .10 | ≤ .25 | ≤ 2 | 45 | RPM | 34380 | 11019 | 5510 | 2750 | 1833 | 1433 |
| | | | | | | (36-54) | Fz | 0.000007 | 0.00002 | 0.00005 | 0.00009 | 0.00014 | 0.00018 |
| | | | | | | | Feed (ipm) | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| | | Slot | 1 | ≤ .15 | ≤ .35 | 35 | RPM | 26740 | 8571 | 4285 | 2139 | 1425 | 1114 |
| | | | | | | (28-42) | Fz | 0.000007 | 0.00002 | 0.00005 | 0.00009 | 0.00014 | 0.00018 |
| | | | | | | | Feed (ipm) | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 |
| TITANIUM ALLOYS Pure Titanium, Ti6Al4V, Ti6Al2Sn4Zr2Mo, Ti4Al4Mo2Sn0.5Si | Profile | ≤ .10 | ≤ .25 | ≤ 2 | 160 | RPM | 122240 | 39179 | 19590 | 9779 | 6516 | 5093 | |
| | | | | | (128-192) | Fz | 0.000012 | 0.00004 | 0.00008 | 0.00015 | 0.00023 | 0.00029 | |
| | | | | | | Feed (ipm) | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | |
| | Slot | 1 | ≤ .15 | ≤ .35 | 130 | RPM | 99320 | 31833 | 15917 | 7946 | 5294 | 4138 | |
| | | | | | (104-156) | Fz | 0.000012 | 0.00004 | 0.00008 | 0.00015 | 0.00023 | 0.00029 | |
| | | | | | | Feed (ipm) | 2.43 | 2.43 | 2.43 | 2.43 | 2.43 | 2.43 | |
| TITANIUM ALLOYS (DIFFICULT) Ti10Al2Fe3Al, Ti5Al5V5Mo3Cr, Ti7Al4Mo, Ti3Al8V6Cr4Zr4Mo, Ti6Al6V6Sn, Ti15V3 Cr3Sn3Al | Profile | ≤ .10 | ≤ .25 | ≤ 2 | 60 | RPM | 45840 | 14692 | 7346 | 3667 | 2443 | 1910 | |
| | | | | | (48-72) | Fz | 0.000009 | 0.00003 | 0.00005 | 0.00011 | 0.00016 | 0.00021 | |
| | | | | | | Feed (ipm) | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | |
| | Slot | 1 | ≤ .15 | ≤ .35 | 45 | RPM | 34380 | 11019 | 5510 | 2750 | 1833 | 1433 | |
| | | | | | (36-54) | Fz | 0.000009 | 0.00003 | 0.00005 | 0.00011 | 0.00016 | 0.00021 | |
| | | | | | | Feed (ipm) | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 | |
| ALUMINUM ALLOYS 2017, 2024, 356, 6061, 7075 | Profile | ≤ .10 | ≤ .25 | ≤ 2 | 1000 | RPM | 764000 | 244872 | 122436 | 61120 | 40725 | 31833 | |
| | | | | | (800-1200) | Fz | 0.000057 | 0.00018 | 0.00036 | 0.00072 | 0.00107 | 0.00137 | |
| | | | | | | Feed (ipm) | 87.50 | 87.50 | 87.50 | 87.50 | 87.50 | 87.50 | |
| | Slot | 1 | ≤ .15 | ≤ .35 | 800 | RPM | 611200 | 195897 | 97949 | 48896 | 32580 | 25467 | |
| | | | | | (640-960) | Fz | 0.000057 | 0.00018 | 0.00036 | 0.00072 | 0.00107 | 0.00137 | |
| | | | | | | Feed (ipm) | 70.00 | 70.00 | 70.00 | 70.00 | 70.00 | 70.00 | |
| COPPER ALLOYS Alum Bronze, C110, Muntz Brass | Profile | ≤ .10 | ≤ .25 | ≤ 2 | 515 | RPM | 393460 | 126109 | 63054 | 31477 | 20973 | 16394 | |
| | | | | | (412-618) | Fz | 0.000043 | 0.00013 | 0.00027 | 0.00054 | 0.00081 | 0.00103 | |
| | | | | | | Feed (ipm) | 33.91 | 33.91 | 33.91 | 33.91 | 33.91 | 33.91 | |
| | Slot | 1 | ≤ .15 | ≤ .35 | 410 | RPM | 313240 | 100397 | 50199 | 25059 | 16697 | 13052 | |
| | | | | | (328-492) | Fz | 0.000043 | 0.00013 | 0.00027 | 0.00054 | 0.00081 | 0.00103 | |
| | | | | | | Feed (ipm) | 27.00 | 27.00 | 27.00 | 27.00 | 27.00 | 27.00 | |
| PLASTICS Polycarbonate, PVC, Polypropylene | Profile | ≤ .10 | ≤ .25 | ≤ 2 | 1000 | RPM | 764000 | 244872 | 122436 | 61120 | 40725 | 31833 | |
| | | | | | (800-1200) | Fz | 0.000057 | 0.00018 | 0.00036 | 0.00072 | 0.00107 | 0.00137 | |
| | | | | | | Feed (ipm) | 87.50 | 87.50 | 87.50 | 87.50 | 87.50 | 87.50 | |
| | Slot | 1 | ≤ .15 | ≤ .35 | 800 | RPM | 611200 | 195897 | 97949 | 48896 | 32580 | 25467 | |
| | | | | | (640-960) | Fz | 0.000057 | 0.00018 | 0.00036 | 0.00072 | 0.00107 | 0.00137 | |
| | | | | | | Feed (ipm) | 70.00 | 70.00 | 70.00 | 70.00 | 70.00 | 70.00 | |

Note:

- Bhn (Brinell) HRC (Rockwell C)
- when recommended speed exceeds your capability, use maximum available and recalculate ipm
- rpm = Vc x 3.82 / D₁
- ipm = Fz x 2 x rpm
- helical ramp at 2 degrees or less, using slotting speed and feed rates (plunging is not recommended)
- reduce speed and feed for materials harder than listed
- reduce feed and Ae when finish milling (.02 x D₁ maximum)
- refer to the KYOCERA SGS Tool Wizard® for complete technical information (www.kyocera-sgstool.com)

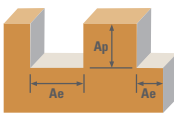
2 Flute, 8xD Overall Reach: Square, Ball



| M2, M2B 8xD Fractional | Hardness | Profile | Ae x D ₁ | | Ap x D ₁ | Vc (SFM) | RPM | Diameter (D ₁) (inch) | | | | | | |
|--|---|-----------------------------|---------------------|-------|---------------------|-------------|------------|--------------------------------------|----------|---------|---------|---------|---------|---------|
| | | | ≤ .25 | ≤ .50 | | | | ≤ .30 | 0.0100 | 0.0156 | 0.0312 | 0.0625 | 0.0938 | 0.1200 |
| CARBON STEELS 1018, 1040, 1080, 1090, 10L50, 1140, 1212, 12L15, 1525, 1536 | ≤ 275 Bhn or ≤ 28 HRc | Profile | ≤ .25 | ≤ .50 | ≤ .30 | 365 | Fz | 139430 | 89378 | 44689 | 22309 | 14865 | 11619 | |
| | | | | | | (292-438) | Feed (ipm) | 0.000026 | 0.00004 | 0.00008 | 0.00016 | 0.00024 | 0.00031 | |
| | | Slot | 1 | ≤ .07 | ≤ .17 | 290 | Fz | 110780 | 71013 | 35506 | 17725 | 11810 | 9232 | |
| | (232-348) | | | | | Feed (ipm) | 0.000026 | 0.00004 | 0.00008 | 0.00016 | 0.00024 | 0.00031 | | |
| | ALLOY STEELS 4140, 4150, 4320, 5120, 5150, 8630, 86L20, 50100 | ≤ 375 Bhn or ≤ 40 HRc | Profile | ≤ .25 | ≤ .50 | ≤ .30 | 210 | Fz | 80220 | 51423 | 25712 | 12835 | 8552 | 6685 |
| | | | | | | | (168-252) | Feed (ipm) | 0.000023 | 0.00004 | 0.00007 | 0.00014 | 0.00022 | 0.00028 |
| Slot | | | 1 | ≤ .07 | ≤ .17 | 165 | Fz | 63030 | 40404 | 20202 | 10085 | 6720 | 5253 | |
| | | (132-198) | | | | Feed (ipm) | 0.000023 | 0.00004 | 0.00007 | 0.00014 | 0.00022 | 0.00028 | | |
| TOOL STEELS A2, D2, H13, L2, M2, P20, S7, T15, W2 | | ≤ 375 Bhn or ≤ 40 HRc | Profile | ≤ .25 | ≤ .50 | ≤ .30 | 175 | Fz | 66850 | 42853 | 21426 | 10696 | 7127 | 5571 |
| | | | | | | | (140-210) | Feed (ipm) | 0.000019 | 0.00003 | 0.00006 | 0.00012 | 0.00018 | 0.00023 |
| | Slot | | 1 | ≤ .07 | ≤ .17 | 140 | Fz | 53480 | 34282 | 17141 | 8557 | 5701 | 4457 | |
| | | (112-168) | | | | Feed (ipm) | 0.000019 | 0.00003 | 0.00006 | 0.00012 | 0.00018 | 0.00023 | | |
| | CAST IRONS (LOW & MEDIUM ALLOY) Gray, Malleable, Ductile | ≤ 220 Bhn or ≤ 19 HRc | Profile | ≤ .25 | ≤ .50 | ≤ .30 | 305 | Fz | 116510 | 74686 | 37343 | 18642 | 12421 | 9709 |
| | | | | | | | (244-366) | Feed (ipm) | 0.000026 | 0.00004 | 0.00008 | 0.00016 | 0.00024 | 0.00031 |
| Slot | | | 1 | ≤ .07 | ≤ .17 | 245 | Fz | 93590 | 59994 | 29997 | 14974 | 9978 | 7799 | |
| | | (196-294) | | | | Feed (ipm) | 0.000026 | 0.00004 | 0.00008 | 0.00016 | 0.00024 | 0.00031 | | |
| STAINLESS STEELS (FREE MACHINING) 303, 416, 420F, 430F, 440F | | ≤ 275 Bhn or ≤ 28 HRc | Profile | ≤ .25 | ≤ .50 | ≤ .30 | 340 | Fz | 129880 | 83256 | 41628 | 20781 | 13846 | 10823 |
| | | | | | | | (272-408) | Feed (ipm) | 0.000026 | 0.00004 | 0.00008 | 0.00016 | 0.00024 | 0.00031 |
| | Slot | | 1 | ≤ .07 | ≤ .17 | 270 | Fz | 103140 | 66115 | 33058 | 16502 | 10996 | 8595 | |
| | | (216-324) | | | | Feed (ipm) | 0.000026 | 0.00004 | 0.00008 | 0.00016 | 0.00024 | 0.00031 | | |
| | STAINLESS STEELS (DIFFICULT) 304, 304L, 316, 316L | ≤ 275 Bhn or ≤ 28 HRc | Profile | ≤ .25 | ≤ .50 | ≤ .30 | 235 | Fz | 89770 | 57545 | 28772 | 14363 | 9570 | 7481 |
| | | | | | | | (188-282) | Feed (ipm) | 0.000023 | 0.00004 | 0.00007 | 0.00014 | 0.00022 | 0.00028 |
| Slot | | | 1 | ≤ .07 | ≤ .17 | 185 | Fz | 70670 | 45301 | 22651 | 11307 | 7534 | 5889 | |
| | | (148-222) | | | | Feed (ipm) | 0.000023 | 0.00004 | 0.00007 | 0.00014 | 0.00022 | 0.00028 | | |
| STAINLESS STEELS (PH) 13-8 PH, 15-5PH, 17-4 PH, CUSTOM 450 | | ≤ 325 Bhn or ≤ 35 HRc | Profile | ≤ .25 | ≤ .50 | ≤ .30 | 215 | Fz | 82130 | 52647 | 26324 | 13141 | 8756 | 6844 |
| | | | | | | | (172-258) | Feed (ipm) | 0.000016 | 0.00003 | 0.00005 | 0.00010 | 0.00015 | 0.00020 |
| | Slot | | 1 | ≤ .07 | ≤ .17 | 170 | Fz | 64940 | 41628 | 20814 | 10390 | 6923 | 5412 | |
| | | (136-204) | | | | Feed (ipm) | 0.000016 | 0.00003 | 0.00005 | 0.00010 | 0.00015 | 0.00020 | | |

continued on next page

2 Flute, 8xD Overall Reach: Square, Ball



| M2, M2B 8xD Fractional | Hardness | Profile | Ae x D ₁ | | Ap x D ₁ | Vc (SFM) | Diameter (D ₁) (inch) | | | | | | |
|---|--|---------|---------------------|-------|---------------------|-------------|--------------------------------------|----------|---------|---------|---------|---------|---------|
| | | | ≤ .25 | ≤ .50 | | | ≤ .30 | 0.0100 | 0.0156 | 0.0312 | 0.0625 | 0.0938 | 0.1200 |
| S | SUPER ALLOYS (NICKEL, COBALT, IRON BASE) Inconel 601, 617, 625, Incoloy, Monel 400 | Profile | ≤ .25 | ≤ .50 | ≤ .30 | 60 | RPM | 22920 | 14692 | 7346 | 3667 | 2443 | 1910 |
| | | | | | | (48-72) | Fz | 0.000014 | 0.00002 | 0.00005 | 0.00009 | 0.00014 | 0.00017 |
| | | | | | | Feed (ipm) | 0.66 | 0.66 | 0.66 | 0.66 | 0.66 | 0.66 | |
| | | Slot | 1 | ≤ .07 | ≤ .17 | 45 | RPM | 17190 | 11019 | 5510 | 2750 | 1833 | 1433 |
| | | | | | | (36-54) | Fz | 0.000014 | 0.00002 | 0.00005 | 0.00009 | 0.00014 | 0.00017 |
| | | | | | | Feed (ipm) | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | |
| | SUPER ALLOYS (NICKEL, COBALT, IRON BASE) Inconel 718, X-750, Incoloy, Waspaloy, Hastelloy, Rene | Profile | ≤ .25 | ≤ .50 | ≤ .30 | 45 | RPM | 17190 | 11019 | 5510 | 2750 | 1833 | 1433 |
| | | | | | | (36-54) | Fz | 0.000010 | 0.00002 | 0.00003 | 0.00006 | 0.00009 | 0.00012 |
| | | | | | | Feed (ipm) | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | |
| | | Slot | 1 | ≤ .07 | ≤ .17 | 35 | RPM | 13370 | 8571 | 4285 | 2139 | 1425 | 1114 |
| | | | | | | (28-42) | Fz | 0.000010 | 0.00002 | 0.00003 | 0.00006 | 0.00009 | 0.00012 |
| | | | | | | Feed (ipm) | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | |
| TITANIUM ALLOYS Pure Titanium, Ti6Al4V, Ti6Al2Sn4Zr2Mo, Ti4Al4Mo2Sn0.5Si | Profile | ≤ .25 | ≤ .50 | ≤ .30 | 160 | RPM | 61120 | 39179 | 19590 | 9779 | 6516 | 5093 | |
| | | | | | (128-192) | Fz | 0.000016 | 0.00003 | 0.00005 | 0.00010 | 0.00015 | 0.00020 | |
| | | | | | Feed (ipm) | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | 1.99 | | |
| | Slot | 1 | ≤ .07 | ≤ .17 | 130 | RPM | 49660 | 31833 | 15917 | 7946 | 5294 | 4138 | |
| | | | | | (104-156) | Fz | 0.000016 | 0.00003 | 0.00005 | 0.00010 | 0.00015 | 0.00020 | |
| | | | | | Feed (ipm) | 1.62 | 1.62 | 1.62 | 1.62 | 1.62 | 1.62 | | |
| TITANIUM ALLOYS (DIFFICULT) Ti10Al2Fe3Al, Ti5Al5V5Mo3Cr, Ti7Al4Mo, Ti3Al8V6Cr4Zr4Mo, Ti6Al6V6Sn, Ti15V3 Cr3Sn3Al | Profile | ≤ .25 | ≤ .50 | ≤ .30 | 60 | RPM | 22920 | 14692 | 7346 | 3667 | 2443 | 1910 | |
| | | | | | (48-72) | Fz | 0.000012 | 0.00002 | 0.00004 | 0.00007 | 0.00011 | 0.00014 | |
| | | | | | Feed (ipm) | 0.53 | 0.53 | 0.53 | 0.53 | 0.53 | 0.53 | | |
| | Slot | 1 | ≤ .07 | ≤ .17 | 45 | RPM | 17190 | 11019 | 5510 | 2750 | 1833 | 1433 | |
| | | | | | (36-54) | Fz | 0.000012 | 0.00002 | 0.00004 | 0.00007 | 0.00011 | 0.00014 | |
| | | | | | Feed (ipm) | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | | |
| N | ALUMINUM ALLOYS 2017, 2024, 356, 6061, 7075 | Profile | ≤ .25 | ≤ .50 | ≤ .30 | 1000 | RPM | 382000 | 244872 | 122436 | 61120 | 40725 | 31833 |
| | | | | | | (800-1200) | Fz | 0.000077 | 0.00012 | 0.00024 | 0.00048 | 0.00072 | 0.00092 |
| | | | | | | Feed (ipm) | 58.50 | 58.50 | 58.50 | 58.50 | 58.50 | 58.50 | |
| | | Slot | 1 | ≤ .07 | ≤ .17 | 800 | RPM | 305600 | 195897 | 97949 | 48896 | 32580 | 25467 |
| | | | | | | (640-960) | Fz | 0.000077 | 0.00012 | 0.00024 | 0.00048 | 0.00072 | 0.00092 |
| | | | | | | Feed (ipm) | 46.80 | 46.80 | 46.80 | 46.80 | 46.80 | 46.80 | |
| COPPER ALLOYS Alum Bronze, C110, Muntz Brass | Profile | ≤ .25 | ≤ .50 | ≤ .30 | 515 | RPM | 196730 | 126109 | 63054 | 31477 | 20973 | 16394 | |
| | | | | | (412-618) | Fz | 0.000057 | 0.00009 | 0.00018 | 0.00036 | 0.00054 | 0.00069 | |
| | | | | | Feed (ipm) | 22.61 | 22.61 | 22.61 | 22.61 | 22.61 | 22.61 | | |
| | Slot | 1 | ≤ .07 | ≤ .17 | 410 | RPM | 156620 | 100397 | 50199 | 25059 | 16697 | 13052 | |
| | | | | | (328-492) | Fz | 0.000057 | 0.00009 | 0.00018 | 0.00036 | 0.00054 | 0.00069 | |
| | | | | | Feed (ipm) | 18.00 | 18.00 | 18.00 | 18.00 | 18.00 | 18.00 | | |
| PLASTICS Polycarbonate, PVC, Polypropylene | Profile | ≤ .25 | ≤ .50 | ≤ .30 | 1000 | RPM | 382000 | 244872 | 122436 | 61120 | 40725 | 31833 | |
| | | | | | (800-1200) | Fz | 0.000077 | 0.00012 | 0.00024 | 0.00048 | 0.00072 | 0.00092 | |
| | | | | | Feed (ipm) | 58.50 | 58.50 | 58.50 | 58.50 | 58.50 | 58.50 | | |
| | Slot | 1 | ≤ .07 | ≤ .17 | 800 | RPM | 305600 | 195897 | 97949 | 48896 | 32580 | 25467 | |
| | | | | | (640-960) | Fz | 0.000077 | 0.00012 | 0.00024 | 0.00048 | 0.00072 | 0.00092 | |
| | | | | | Feed (ipm) | 46.80 | 46.80 | 46.80 | 46.80 | 46.80 | 46.80 | | |

Note:

- Bhn (Brinell) HRC (Rockwell C)
- when recommended speed exceeds your capability, use maximum available and recalculate ipm
- rpm = Vc x 3.82 / D₁
- ipm = Fz x 2 x rpm
- helical ramp at 1 degree or less, using slotting speed and feed rates (plunging is not recommended)
- reduce speed and feed for materials harder than listed
- reduce feed and Ae when finish milling (.02 x D₁ maximum)
- refer to the KYOCERA SGS Tool Wizard® for complete technical information (www.kyocera-sgstool.com)