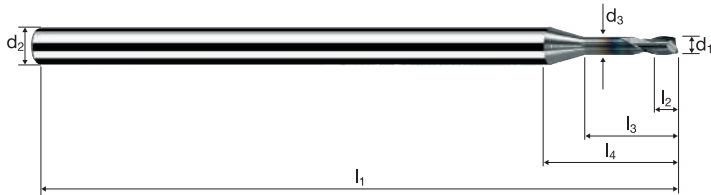


Cylindrical end mills MicroX (Microcut-C5H)

Shank \varnothing 3mm, cylindrical neck, 5xd



HM λ 25°
XA γ -10°

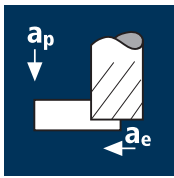


ToolSchool

| | | | | | | | | |
|----------|-------------|--------------|--------------|-----------|-----------|----------|-------------|----------|
| Rm < 850 | Rm 850-1100 | Rm 1100-1300 | Rm 1300-1500 | HRC 48-56 | HRC 56-60 | HRC > 60 | Ti Titanium | Tungsten |
|----------|-------------|--------------|--------------|-----------|-----------|----------|-------------|----------|

| Ø Code | d ₁ ±0.01 | d ₂ h6 | d ₃ | l ₁ | l ₂ | l ₃ | l ₄ | 45° | α | z | DURO-S |
|--|----------------------|-------------------|----------------|----------------|----------------|----------------|----------------|------|-------|---|--------|
| | | | | | | | | | | | D5724 |
| Example: Order-N°: D 5724 050 | | | | | | | | | | | |
| | | | | | | | | | | | |
| 050 | 0.50 | 3.00 | 0.45 | 40 | 0.60 | 2.50 | 7.65 | - | 10.0° | 2 | ● |
| 060 | 0.60 | 3.00 | 0.55 | 40 | 0.72 | 3.00 | 7.97 | - | 9.5° | 2 | ● |
| 070 | 0.70 | 3.00 | 0.65 | 40 | 0.84 | 3.50 | 8.28 | - | 8.5° | 2 | ● |
| 080 | 0.80 | 3.00 | 0.75 | 40 | 0.96 | 4.00 | 8.59 | - | 8.0° | 2 | ● |
| 090 | 0.90 | 3.00 | 0.85 | 40 | 1.08 | 4.50 | 8.91 | 0.07 | 7.5° | 2 | ● |
| 100 | 1.00 | 3.00 | 0.95 | 50 | 1.20 | 5.00 | 9.22 | 0.07 | 7.0° | 2 | ● |
| 108 | 1.20 | 3.00 | 1.10 | 50 | 1.44 | 6.00 | 9.94 | 0.07 | 5.5° | 2 | ● |
| 120 | 1.50 | 3.00 | 1.40 | 50 | 1.80 | 7.50 | 10.88 | 0.07 | 4.5° | 2 | ● |
| 132 | 1.80 | 3.00 | 1.70 | 50 | 2.16 | 9.00 | 11.82 | 0.08 | 3.5° | 2 | ● |
| 140 | 2.00 | 3.00 | 1.90 | 50 | 2.40 | 10.00 | 12.45 | 0.10 | 2.5° | 2 | ● |
| 152 | 2.30 | 3.00 | 2.10 | 50 | 2.76 | 11.50 | 13.57 | 0.10 | 2.0° | 2 | ● |
| 160 | 2.50 | 3.00 | 2.30 | 50 | 3.00 | 12.50 | 14.20 | 0.10 | 1.5° | 2 | ● |
| 172 | 2.80 | 3.00 | 2.60 | 50 | 3.36 | 14.00 | 15.14 | 0.10 | 0.5° | 2 | ● |
| 180 | 3.00 | 3.00 | 2.80 | 50 | 3.60 | 14.56 | 15.00 | 0.10 | 0.0° | 2 | ● |

Application



Material

Hardened tool steel
42 - 48 HRC



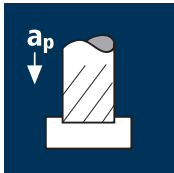
Hardened tool steel
48 - 52 HRC



Hardened tool steel
52 - 56 HRC



Hardened tool steel
56 - 60 HRC



Hardened tool steel
42 - 48 HRC



Hardened tool steel
48 - 52 HRC



Hardened tool steel
52 - 56 HRC



Hardened tool steel
56 - 60 HRC



| d1 [mm] | z | v _r [m/min] | f _s [mm] | a _p [mm] | a _e [mm] | n [min ⁻¹] | v _r [mm/min] | Q [mm ³ /min] |
|------------|---|---------------------------|------------------------|------------------------|------------------------|---------------------------|----------------------------|-----------------------------|
| 0.50 | 2 | 66 | 0.015 | 0.030 | 0.100 | 42015 | 1260 | 3.8 |
| 0.60 | 2 | 79 | 0.015 | 0.030 | 0.120 | 41910 | 1255 | 4.5 |
| 0.80 | 2 | 106 | 0.020 | 0.040 | 0.160 | 42175 | 1685 | 10.8 |
| 1.00 | 2 | 132 | 0.025 | 0.050 | 0.200 | 42015 | 2100 | 21.0 |
| 1.20 | 2 | 140 | 0.030 | 0.060 | 0.240 | 37135 | 2230 | 32.1 |
| 1.50 | 2 | 140 | 0.040 | 0.080 | 0.300 | 29710 | 2375 | 57.0 |
| 2.00 | 2 | 140 | 0.050 | 0.100 | 0.400 | 22280 | 2230 | 89.1 |
| 2.50 | 2 | 140 | 0.065 | 0.130 | 0.500 | 17825 | 2315 | 150.6 |
| 3.00 | 2 | 140 | 0.075 | 0.150 | 0.600 | 14855 | 2230 | 200.5 |
| 0.50 | 2 | 66 | 0.014 | 0.030 | 0.100 | 42015 | 1175 | 3.5 |
| 0.60 | 2 | 79 | 0.014 | 0.030 | 0.120 | 41910 | 1175 | 4.2 |
| 0.80 | 2 | 106 | 0.020 | 0.040 | 0.160 | 42175 | 1685 | 10.8 |
| 1.00 | 2 | 120 | 0.024 | 0.050 | 0.200 | 38195 | 1835 | 18.3 |
| 1.20 | 2 | 120 | 0.028 | 0.060 | 0.240 | 31830 | 1785 | 25.7 |
| 1.50 | 2 | 120 | 0.038 | 0.080 | 0.300 | 25465 | 1935 | 46.4 |
| 2.00 | 2 | 120 | 0.048 | 0.100 | 0.400 | 19100 | 1835 | 73.3 |
| 2.50 | 2 | 120 | 0.062 | 0.130 | 0.500 | 15280 | 1895 | 123.1 |
| 3.00 | 2 | 120 | 0.072 | 0.150 | 0.600 | 12730 | 1835 | 165.0 |
| 0.50 | 2 | 66 | 0.014 | 0.030 | 0.100 | 42015 | 1175 | 3.5 |
| 0.60 | 2 | 79 | 0.014 | 0.030 | 0.120 | 41910 | 1175 | 4.2 |
| 0.80 | 2 | 100 | 0.018 | 0.040 | 0.160 | 39790 | 1430 | 9.2 |
| 1.00 | 2 | 100 | 0.022 | 0.050 | 0.200 | 31830 | 1400 | 14.0 |
| 1.20 | 2 | 100 | 0.026 | 0.060 | 0.240 | 26525 | 1380 | 19.9 |
| 1.50 | 2 | 100 | 0.036 | 0.080 | 0.300 | 21220 | 1530 | 36.7 |
| 2.00 | 2 | 100 | 0.044 | 0.100 | 0.400 | 15915 | 1400 | 56.0 |
| 2.50 | 2 | 100 | 0.058 | 0.130 | 0.500 | 12730 | 1475 | 96.0 |
| 3.00 | 2 | 100 | 0.066 | 0.150 | 0.600 | 10610 | 1400 | 126.1 |
| 0.50 | 2 | 60 | 0.012 | 0.030 | 0.100 | 38195 | 915 | 2.8 |
| 0.60 | 2 | 60 | 0.012 | 0.030 | 0.120 | 31830 | 765 | 2.8 |
| 0.80 | 2 | 60 | 0.016 | 0.040 | 0.160 | 23875 | 765 | 4.9 |
| 1.00 | 2 | 60 | 0.020 | 0.050 | 0.200 | 19100 | 765 | 7.6 |
| 1.20 | 2 | 60 | 0.024 | 0.060 | 0.240 | 15915 | 765 | 11.0 |
| 1.50 | 2 | 60 | 0.032 | 0.080 | 0.300 | 12730 | 815 | 19.6 |
| 2.00 | 2 | 60 | 0.040 | 0.100 | 0.400 | 9550 | 765 | 30.6 |
| 2.50 | 2 | 60 | 0.052 | 0.130 | 0.500 | 7640 | 795 | 51.6 |
| 3.00 | 2 | 60 | 0.060 | 0.150 | 0.600 | 6365 | 765 | 68.8 |
| 0.50 | 2 | 66 | 0.010 | 0.040 | 0.500 | 42015 | 840 | 16.8 |
| 0.60 | 2 | 79 | 0.015 | 0.040 | 0.600 | 41910 | 1255 | 30.2 |
| 0.80 | 2 | 106 | 0.020 | 0.060 | 0.800 | 42175 | 1685 | 81.0 |
| 1.00 | 2 | 120 | 0.020 | 0.070 | 1.000 | 38195 | 1530 | 107.0 |
| 1.20 | 2 | 120 | 0.025 | 0.080 | 1.200 | 31830 | 1590 | 152.8 |
| 1.50 | 2 | 120 | 0.035 | 0.110 | 1.500 | 25465 | 1785 | 294.1 |
| 2.00 | 2 | 120 | 0.045 | 0.140 | 2.000 | 19100 | 1720 | 481.3 |
| 2.50 | 2 | 120 | 0.055 | 0.180 | 2.500 | 15280 | 1680 | 756.3 |
| 3.00 | 2 | 120 | 0.065 | 0.210 | 3.000 | 12730 | 1655 | 1042.8 |
| 0.50 | 2 | 66 | 0.010 | 0.040 | 0.500 | 42015 | 840 | 16.8 |
| 0.60 | 2 | 79 | 0.014 | 0.040 | 0.600 | 41910 | 1175 | 28.2 |
| 0.80 | 2 | 100 | 0.020 | 0.060 | 0.800 | 39790 | 1590 | 76.4 |
| 1.00 | 2 | 100 | 0.020 | 0.070 | 1.000 | 31830 | 1275 | 89.1 |
| 1.20 | 2 | 100 | 0.024 | 0.080 | 1.200 | 26525 | 1275 | 122.2 |
| 1.50 | 2 | 100 | 0.034 | 0.110 | 1.500 | 21220 | 1445 | 238.1 |
| 2.00 | 2 | 100 | 0.042 | 0.140 | 2.000 | 15915 | 1335 | 374.3 |
| 2.50 | 2 | 100 | 0.052 | 0.180 | 2.500 | 12730 | 1325 | 595.9 |
| 3.00 | 2 | 100 | 0.062 | 0.210 | 3.000 | 10610 | 1315 | 828.9 |
| 0.50 | 2 | 66 | 0.008 | 0.040 | 0.500 | 42015 | 670 | 13.4 |
| 0.60 | 2 | 79 | 0.014 | 0.040 | 0.600 | 41910 | 1175 | 28.2 |
| 0.80 | 2 | 80 | 0.018 | 0.060 | 0.800 | 31830 | 1145 | 55.0 |
| 1.00 | 2 | 80 | 0.018 | 0.070 | 1.000 | 25465 | 915 | 64.2 |
| 1.20 | 2 | 80 | 0.022 | 0.080 | 1.200 | 21220 | 935 | 89.6 |
| 1.50 | 2 | 80 | 0.030 | 0.110 | 1.500 | 16975 | 1020 | 168.1 |
| 2.00 | 2 | 80 | 0.040 | 0.140 | 2.000 | 12730 | 1020 | 285.2 |
| 2.50 | 2 | 80 | 0.048 | 0.180 | 2.500 | 10185 | 980 | 440.0 |
| 3.00 | 2 | 80 | 0.058 | 0.210 | 3.000 | 8490 | 985 | 620.3 |
| 0.50 | 2 | 40 | 0.008 | 0.040 | 0.500 | 25465 | 405 | 8.1 |
| 0.60 | 2 | 40 | 0.012 | 0.040 | 0.600 | 21220 | 510 | 12.2 |
| 0.80 | 2 | 40 | 0.016 | 0.060 | 0.800 | 15915 | 510 | 24.4 |
| 1.00 | 2 | 40 | 0.016 | 0.070 | 1.000 | 12730 | 405 | 28.5 |
| 1.20 | 2 | 40 | 0.020 | 0.080 | 1.200 | 10610 | 425 | 40.7 |
| 1.50 | 2 | 40 | 0.028 | 0.110 | 1.500 | 8490 | 475 | 78.4 |
| 2.00 | 2 | 40 | 0.036 | 0.140 | 2.000 | 6365 | 460 | 128.3 |
| 2.50 | 2 | 40 | 0.044 | 0.180 | 2.500 | 5095 | 450 | 201.7 |
| 3.00 | 2 | 40 | 0.052 | 0.210 | 3.000 | 4245 | 440 | 278.1 |