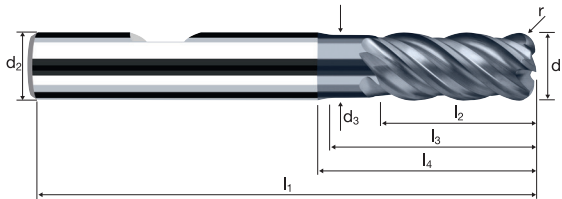
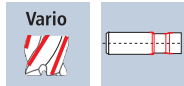


Corner radius end mills E-Cut

Smooth-edged, normal version, short neck

Base-X
B
 $l_2 = 2.2 \times d_1$
 $l_3 = 3.0 \times d_1$

HM
MG10 λ **43°**
 γ **6°**



new!

Roughing HDC Roughing HPC Finishing

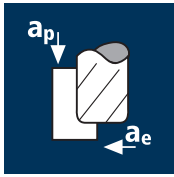
ReTool®

Rm < 850 Rm 850-1100 Rm 1100-1300 Rm 1300-1500 HRC 48-56 Inox Stainless Ti Titanium GG(G) Tool Steel

| Ø Code | d1 e8 | d2 h6 | d3 | l1 | l2 | l3 | l4 | r 0/+0.03 | α | z | POLYCHROM | |
|--|-------|-------|-------|----|-------|-------|-------|-----------|------|---|-----------|----------|
| | | | | | | | | | | | Order-N° | Order-N° |
| Example: Order-N° Coating P Article-N° 8407 ø-Code 178 | | | | | | | | | | | | |
| 178 | 3.00 | 6.00 | 2.80 | 54 | 6.60 | 9.00 | 15.37 | 0.200 | 5.8° | 4 | ● | P8407 |
| 218 | 4.00 | 6.00 | 3.70 | 54 | 9.00 | 12.00 | 16.82 | 0.200 | 3.9° | 4 | ● | P8307 |
| 258 | 5.00 | 6.00 | 4.60 | 57 | 11.00 | 15.00 | 18.27 | 0.200 | 2.1° | 4 | ● | |
| 297 | 6.00 | 6.00 | 5.50 | 57 | 13.50 | 18.00 | 19.85 | 0.200 | 0.0° | 4 | ● | |
| 385 | 8.00 | 8.00 | 7.40 | 63 | 18.00 | 24.00 | 26.37 | 0.200 | 0.0° | 4 | ● | |
| 445 | 10.00 | 10.00 | 9.20 | 74 | 22.00 | 30.00 | 33.01 | 0.200 | 0.0° | 4 | ● | |
| 496 | 12.00 | 12.00 | 11.00 | 85 | 27.00 | 36.00 | 39.71 | 0.200 | 0.0° | 4 | ● | |
| 180 | 3.00 | 6.00 | 2.80 | 54 | 6.60 | 9.00 | 15.37 | 0.500 | 5.8° | 4 | ● | |
| 220 | 4.00 | 6.00 | 3.70 | 54 | 9.00 | 12.00 | 16.82 | 0.500 | 3.9° | 4 | ● | |
| 260 | 5.00 | 6.00 | 4.60 | 57 | 11.00 | 15.00 | 18.27 | 0.500 | 2.1° | 4 | ● | |
| 300 | 6.00 | 6.00 | 5.50 | 57 | 13.50 | 18.00 | 19.85 | 0.500 | 0.0° | 4 | ● | |
| 388 | 8.00 | 8.00 | 7.40 | 63 | 18.00 | 24.00 | 26.35 | 0.500 | 0.0° | 4 | ● | |
| 448 | 10.00 | 10.00 | 9.20 | 74 | 22.00 | 30.00 | 33.00 | 0.500 | 0.0° | 4 | ● | |
| 498 | 12.00 | 12.00 | 11.00 | 85 | 27.00 | 36.00 | 39.70 | 0.500 | 0.0° | 4 | ● | |
| 301 | 6.00 | 6.00 | 5.50 | 57 | 13.50 | 18.00 | 19.85 | 0.800 | 0.0° | 4 | ● | |
| 389 | 8.00 | 8.00 | 7.40 | 63 | 18.00 | 24.00 | 26.35 | 0.800 | 0.0° | 4 | ● | |
| 449 | 10.00 | 10.00 | 9.20 | 74 | 22.00 | 30.00 | 33.00 | 0.800 | 0.0° | 4 | ● | |
| 499 | 12.00 | 12.00 | 11.00 | 85 | 27.00 | 36.00 | 39.70 | 0.800 | 0.0° | 4 | ● | |

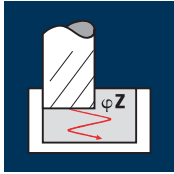
Application

Material



Steel
< 850 N/mm²

| d ₁ [mm] | z | v _c [m/min] | f _z [mm] | a _p [mm] | a _e [mm] | n [min ⁻¹] | v _f [mm/min] | Q [cm ³ /min] | φZ [°] |
|------------------------|---|---------------------------|------------------------|------------------------|------------------------|---------------------------|----------------------------|-----------------------------|-----------|
| 3.00 | 4 | 155 | 0.024 | 3.750 | 1.200 | 16445 | 1579 | 7.1 | 1.5° |
| 4.00 | 4 | 155 | 0.034 | 5.000 | 1.600 | 12335 | 1678 | 13.4 | 1.5° |
| 5.00 | 4 | 155 | 0.042 | 6.250 | 2.000 | 9870 | 1658 | 20.7 | 1.5° |
| 6.00 | 4 | 155 | 0.045 | 9.000 | 2.400 | 8225 | 1481 | 32.0 | 1.5° |
| 8.00 | 4 | 155 | 0.060 | 12.000 | 3.200 | 6165 | 1480 | 56.8 | 1.5° |
| 10.00 | 4 | 155 | 0.075 | 15.000 | 4.000 | 4935 | 1481 | 88.8 | 1.5° |
| 12.00 | 4 | 155 | 0.084 | 18.000 | 4.800 | 4110 | 1381 | 119.3 | 1.5° |



Steel
850 - 1100 N/mm²

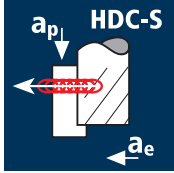
| d ₁ [mm] | z | v _c [m/min] | f _z [mm] | a _p [mm] | a _e [mm] | n [min ⁻¹] | v _f [mm/min] | Q [cm ³ /min] | φZ [°] |
|------------------------|---|---------------------------|------------------------|------------------------|------------------------|---------------------------|----------------------------|-----------------------------|-----------|
| 3.00 | 4 | 135 | 0.022 | 3.750 | 1.200 | 14325 | 1261 | 5.7 | 2.0° |
| 4.00 | 4 | 135 | 0.028 | 5.000 | 1.600 | 10745 | 1203 | 9.6 | 2.0° |
| 5.00 | 4 | 135 | 0.037 | 6.250 | 2.000 | 8595 | 1272 | 15.9 | 2.0° |
| 6.00 | 4 | 135 | 0.039 | 9.000 | 2.400 | 7160 | 1117 | 24.1 | 2.0° |
| 8.00 | 4 | 135 | 0.052 | 12.000 | 3.200 | 5370 | 1117 | 42.9 | 2.0° |
| 10.00 | 4 | 135 | 0.065 | 15.000 | 4.000 | 4295 | 1117 | 67.0 | 2.0° |
| 12.00 | 4 | 135 | 0.078 | 18.000 | 4.800 | 3580 | 1117 | 96.5 | 2.0° |

Inox normal
[Cr-Ni/1.4301]
[Cr-Ni-Mo/1.4571]

| d ₁ [mm] | z | v _c [m/min] | f _z [mm] | a _p [mm] | a _e [mm] | n [min ⁻¹] | v _f [mm/min] | Q [cm ³ /min] | φZ [°] |
|------------------------|---|---------------------------|------------------------|------------------------|------------------------|---------------------------|----------------------------|-----------------------------|-----------|
| 3.00 | 4 | 90 | 0.014 | 3.750 | 1.200 | 9550 | 516 | 2.3 | 1.5° |
| 4.00 | 4 | 90 | 0.018 | 5.000 | 1.600 | 7160 | 516 | 4.1 | 1.5° |
| 5.00 | 4 | 90 | 0.023 | 6.250 | 2.000 | 5730 | 516 | 6.4 | 1.5° |
| 6.00 | 4 | 90 | 0.027 | 9.000 | 2.400 | 4775 | 516 | 11.1 | 1.5° |
| 8.00 | 4 | 90 | 0.036 | 12.000 | 3.200 | 3580 | 516 | 19.8 | 1.5° |
| 10.00 | 4 | 90 | 0.045 | 15.000 | 4.000 | 2865 | 516 | 30.9 | 1.5° |
| 12.00 | 4 | 90 | 0.054 | 18.000 | 4.800 | 2385 | 515 | 44.5 | 1.5° |

Application

Material



Steel
< 850 N/mm²

| d ₁ [mm] | z | v _c [m/min] | f _z [mm] | a _p [mm] | a _e [mm] | n [min ⁻¹] | v _f [mm/min] | Q [cm ³ /min] |
|------------------------|---|---------------------------|------------------------|------------------------|------------------------|---------------------------|----------------------------|-----------------------------|
| 3.00 | 4 | 243 | 0.051 | 8.000 | 0.300 | 25785 | 5260 | 12.6 |
| 4.00 | 4 | 243 | 0.069 | 11.000 | 0.400 | 19335 | 5337 | 23.5 |
| 5.00 | 4 | 243 | 0.086 | 13.000 | 0.500 | 15470 | 5322 | 34.6 |
| 6.00 | 4 | 243 | 0.103 | 13.000 | 0.600 | 12890 | 5311 | 41.4 |
| 8.00 | 4 | 243 | 0.136 | 19.000 | 0.800 | 9670 | 5261 | 80.0 |
| 10.00 | 4 | 243 | 0.171 | 23.000 | 1.000 | 7735 | 5291 | 121.7 |
| 12.00 | 4 | 243 | 0.207 | 27.000 | 1.200 | 6445 | 5337 | 172.9 |

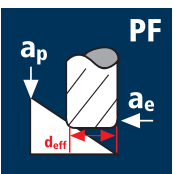
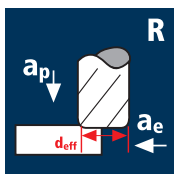
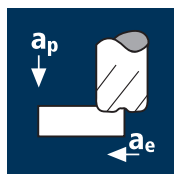
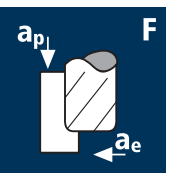
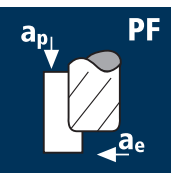
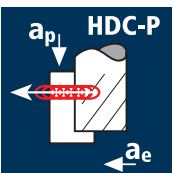
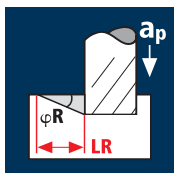
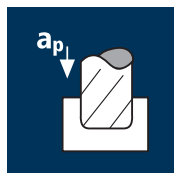
Steel
850 - 1100 N/mm²

| d ₁ [mm] | z | v _c [m/min] | f _z [mm] | a _p [mm] | a _e [mm] | n [min ⁻¹] | v _f [mm/min] | Q [cm ³ /min] |
|------------------------|---|---------------------------|------------------------|------------------------|------------------------|---------------------------|----------------------------|-----------------------------|
| 3.00 | 4 | 216 | 0.051 | 8.000 | 0.300 | 22920 | 4676 | 11.2 |
| 4.00 | 4 | 216 | 0.069 | 11.000 | 0.400 | 17190 | 4744 | 20.9 |
| 5.00 | 4 | 216 | 0.086 | 13.000 | 0.500 | 13750 | 4730 | 30.7 |
| 6.00 | 4 | 216 | 0.103 | 13.000 | 0.600 | 11460 | 4722 | 36.8 |
| 8.00 | 4 | 216 | 0.136 | 19.000 | 0.800 | 8595 | 4676 | 71.1 |
| 10.00 | 4 | 216 | 0.171 | 23.000 | 1.000 | 6875 | 4703 | 108.2 |
| 12.00 | 4 | 216 | 0.207 | 27.000 | 1.200 | 5730 | 4744 | 153.7 |

Inox normal
[Cr-Ni/1.4301]
[Cr-Ni-Mo/1.4571]

| d ₁ [mm] | z | v _c [m/min] | f _z [mm] | a _p [mm] | a _e [mm] | n [min ⁻¹] | v _f [mm/min] | Q [cm ³ /min] |
|------------------------|---|---------------------------|------------------------|------------------------|------------------------|---------------------------|----------------------------|-----------------------------|
| 3.00 | 4 | 132 | 0.038 | 8.000 | 0.225 | 14005 | 2129 | 3.8 |
| 4.00 | 4 | 132 | 0.053 | 11.000 | 0.300 | 10505 | 2227 | 7.3 |
| 5.00 | 4 | 132 | 0.066 | 13.000 | 0.375 | 8405 | 2219 | 10.8 |
| 6.00 | 4 | 132 | 0.080 | 13.000 | 0.450 | 7005 | 2242 | 13.1 |
| 8.00 | 4 | 132 | 0.106 | 19.000 | 0.600 | 5250 | 2226 | 25.4 |
| 10.00 | 4 | 132 | 0.133 | 23.000 | 0.750 | 4200 | 2234 | 38.5 |
| 12.00 | 4 | 132 | 0.159 | 27.000 | 0.900 | 3500 | 2226 | 54.1 |

Precise cutting data for other applications and materials can be found in the cutting data software ToolExpert

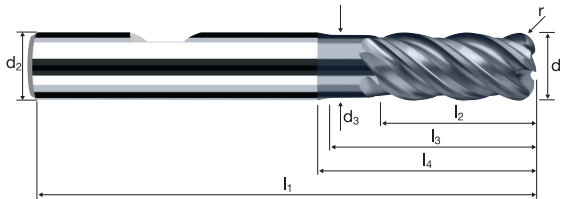
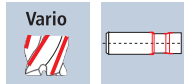


Corner radius end mills E-Cut

Smooth-edged, normal version, short neck

Base-X
B
 $l_2 = 2.2 \times d_1$
 $l_3 = 3.0 \times d_1$

HM
MG10 λ **43°**
 γ **6°**



new!

Roughing HDC Roughing HPC Finishing

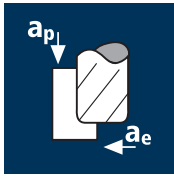
ReTool®

Rm < 850 Rm 850-1100 Rm 1100-1300 Rm 1300-1500 HRC 48-56 Inox Stainless Ti Titanium GG(G) Tool Steel

| Ø Code | d1 e8 | d2 h6 | d3 | l1 | l2 | l3 | l4 | r 0/+0.03 | α | z | POLYCHROM | | |
|--------|-------|-------|-------|-----|-------|-------|-------|-----------|------|---|-------------------|-------------|------------|
| | | | | | | | | | | | Example: Order-N° | Coating | Article-N° |
| | | | | | | | | | | | P | 8407 | 302 |
| 302 | 6.00 | 6.00 | 5.50 | 57 | 13.50 | 18.00 | 19.85 | 1.000 | 0.0° | 4 | | ● | |
| 391 | 8.00 | 8.00 | 7.40 | 63 | 18.00 | 24.00 | 26.35 | 1.000 | 0.0° | 4 | | ● | |
| 450 | 10.00 | 10.00 | 9.20 | 74 | 22.00 | 30.00 | 33.00 | 1.000 | 0.0° | 4 | | ● | |
| 501 | 12.00 | 12.00 | 11.00 | 85 | 27.00 | 36.00 | 39.70 | 1.000 | 0.0° | 4 | | ● | |
| 608 | 16.00 | 16.00 | 15.00 | 102 | 36.00 | 48.00 | 52.27 | 1.000 | 0.0° | 4 | | ● | |
| 304 | 6.00 | 6.00 | 5.50 | 57 | 13.50 | 18.00 | 19.85 | 1.500 | 0.0° | 4 | | ● | |
| 393 | 8.00 | 8.00 | 7.40 | 63 | 18.00 | 24.00 | 26.35 | 1.500 | 0.0° | 4 | | ● | |
| 453 | 10.00 | 10.00 | 9.20 | 74 | 22.00 | 30.00 | 33.00 | 1.500 | 0.0° | 4 | | ● | |
| 503 | 12.00 | 12.00 | 11.00 | 85 | 27.00 | 36.00 | 39.70 | 1.500 | 0.0° | 4 | | ● | |
| 610 | 16.00 | 16.00 | 15.00 | 102 | 36.00 | 48.00 | 52.25 | 1.500 | 0.0° | 4 | | ● | |
| 306 | 6.00 | 6.00 | 5.50 | 57 | 13.50 | 18.00 | 19.85 | 2.000 | 0.0° | 4 | | ● | |
| 395 | 8.00 | 8.00 | 7.40 | 63 | 18.00 | 24.00 | 26.35 | 2.000 | 0.0° | 4 | | ● | |
| 455 | 10.00 | 10.00 | 9.20 | 74 | 22.00 | 30.00 | 33.00 | 2.000 | 0.0° | 4 | | ● | |
| 505 | 12.00 | 12.00 | 11.00 | 85 | 27.00 | 36.00 | 39.70 | 2.000 | 0.0° | 4 | | ● | |
| 611 | 16.00 | 16.00 | 15.00 | 102 | 36.00 | 48.00 | 52.25 | 2.000 | 0.0° | 4 | | ● | |
| 683 | 20.00 | 20.00 | 19.00 | 115 | 44.00 | 60.00 | 64.77 | 2.000 | 0.0° | 4 | | ● | |
| 457 | 10.00 | 10.00 | 9.20 | 74 | 22.00 | 30.00 | 33.00 | 2.500 | 0.0° | 4 | | ● | |
| 506 | 12.00 | 12.00 | 11.00 | 85 | 27.00 | 36.00 | 39.70 | 2.500 | 0.0° | 4 | | ● | |
| 612 | 16.00 | 16.00 | 15.00 | 102 | 36.00 | 48.00 | 52.25 | 2.500 | 0.0° | 4 | | ● | |

Application

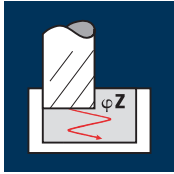
Material



Steel
< 850 N/mm²

P
 P

| d ₁ [mm] | z | v _c [m/min] | f _z [mm] | a _p [mm] | a _e [mm] | n [min ⁻¹] | v _f [mm/min] | Q [cm ³ /min] | φ _Z [°] |
|---------------------|---|------------------------|---------------------|---------------------|---------------------|------------------------|-------------------------|--------------------------|--------------------|
| 6.00 | 4 | 155 | 0.045 | 9.000 | 2.400 | 8225 | 1481 | 32.0 | 1.5° |
| 8.00 | 4 | 155 | 0.060 | 12.000 | 3.200 | 6165 | 1480 | 56.8 | 1.5° |
| 10.00 | 4 | 155 | 0.075 | 15.000 | 4.000 | 4935 | 1481 | 88.8 | 1.5° |
| 12.00 | 4 | 155 | 0.084 | 18.000 | 4.800 | 4110 | 1381 | 119.3 | 1.5° |
| 16.00 | 4 | 155 | 0.096 | 24.000 | 6.400 | 3085 | 1185 | 182.0 | 1.5° |
| 20.00 | 4 | 155 | 0.110 | 30.000 | 8.000 | 2465 | 1085 | 260.3 | 1.5° |



Steel
850 - 1100 N/mm²

P
 P

| d ₁ [mm] | z | v _c [m/min] | f _z [mm] | a _p [mm] | a _e [mm] | n [min ⁻¹] | v _f [mm/min] | Q [cm ³ /min] | φ _Z [°] |
|---------------------|---|------------------------|---------------------|---------------------|---------------------|------------------------|-------------------------|--------------------------|--------------------|
| 6.00 | 4 | 135 | 0.039 | 9.000 | 2.400 | 7160 | 1117 | 24.1 | 2.0° |
| 8.00 | 4 | 135 | 0.052 | 12.000 | 3.200 | 5370 | 1117 | 42.9 | 2.0° |
| 10.00 | 4 | 135 | 0.065 | 15.000 | 4.000 | 4295 | 1117 | 67.0 | 2.0° |
| 12.00 | 4 | 135 | 0.078 | 18.000 | 4.800 | 3580 | 1117 | 96.5 | 2.0° |
| 16.00 | 4 | 135 | 0.088 | 24.000 | 6.400 | 2685 | 945 | 145.2 | 2.0° |
| 20.00 | 4 | 135 | 0.100 | 30.000 | 8.000 | 2150 | 860 | 206.4 | 2.0° |

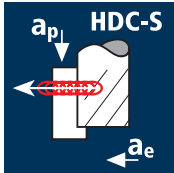
Inox normal
[Cr-Ni/1.4301]
[Cr-Ni-Mo/1.4571]

P

| d ₁ [mm] | z | v _c [m/min] | f _z [mm] | a _p [mm] | a _e [mm] | n [min ⁻¹] | v _f [mm/min] | Q [cm ³ /min] | φ _Z [°] |
|---------------------|---|------------------------|---------------------|---------------------|---------------------|------------------------|-------------------------|--------------------------|--------------------|
| 6.00 | 4 | 90 | 0.027 | 9.000 | 2.400 | 4775 | 516 | 11.1 | 1.5° |
| 8.00 | 4 | 90 | 0.036 | 12.000 | 3.200 | 3580 | 516 | 19.8 | 1.5° |
| 10.00 | 4 | 90 | 0.045 | 15.000 | 4.000 | 2865 | 516 | 30.9 | 1.5° |
| 12.00 | 4 | 90 | 0.054 | 18.000 | 4.800 | 2385 | 515 | 44.5 | 1.5° |
| 16.00 | 4 | 90 | 0.056 | 24.000 | 6.400 | 1790 | 401 | 61.6 | 1.5° |
| 20.00 | 4 | 90 | 0.070 | 30.000 | 8.000 | 1430 | 400 | 96.1 | 1.5° |

Application

Material



Steel
< 850 N/mm²

P
 P

| d ₁ [mm] | z | v _c [m/min] | f _z [mm] | a _p [mm] | a _e [mm] | n [min ⁻¹] | v _f [mm/min] | Q [cm ³ /min] |
|---------------------|---|------------------------|---------------------|---------------------|---------------------|------------------------|-------------------------|--------------------------|
| 6.00 | 4 | 243 | 0.103 | 13.000 | 0.600 | 12890 | 5311 | 41.4 |
| 8.00 | 4 | 243 | 0.136 | 19.000 | 0.800 | 9670 | 5261 | 80.0 |
| 10.00 | 4 | 243 | 0.171 | 23.000 | 1.000 | 7735 | 5291 | 121.7 |
| 12.00 | 4 | 243 | 0.207 | 27.000 | 1.200 | 6445 | 5337 | 172.9 |
| 16.00 | 4 | 243 | 0.228 | 32.000 | 1.600 | 4835 | 4410 | 225.8 |
| 20.00 | 4 | 243 | 0.286 | 40.000 | 2.000 | 3865 | 4422 | 353.7 |

Steel
850 - 1100 N/mm²

P
 P

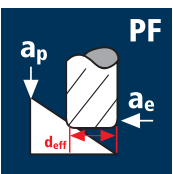
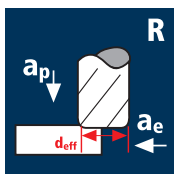
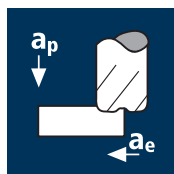
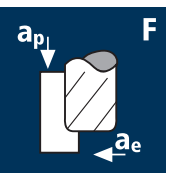
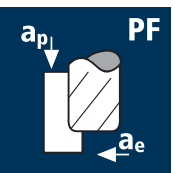
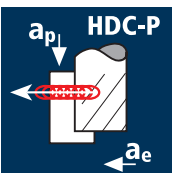
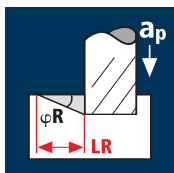
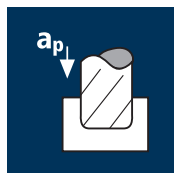
| d ₁ [mm] | z | v _c [m/min] | f _z [mm] | a _p [mm] | a _e [mm] | n [min ⁻¹] | v _f [mm/min] | Q [cm ³ /min] |
|---------------------|---|------------------------|---------------------|---------------------|---------------------|------------------------|-------------------------|--------------------------|
| 6.00 | 4 | 216 | 0.103 | 13.000 | 0.600 | 11460 | 4722 | 36.8 |
| 8.00 | 4 | 216 | 0.136 | 19.000 | 0.800 | 8595 | 4676 | 71.1 |
| 10.00 | 4 | 216 | 0.171 | 23.000 | 1.000 | 6875 | 4703 | 108.2 |
| 12.00 | 4 | 216 | 0.207 | 27.000 | 1.200 | 5730 | 4744 | 153.7 |
| 16.00 | 4 | 216 | 0.228 | 32.000 | 1.600 | 4295 | 3917 | 200.6 |
| 20.00 | 4 | 216 | 0.286 | 40.000 | 2.000 | 3440 | 3935 | 314.8 |

Inox normal
[Cr-Ni/1.4301]
[Cr-Ni-Mo/1.4571]

P

| d ₁ [mm] | z | v _c [m/min] | f _z [mm] | a _p [mm] | a _e [mm] | n [min ⁻¹] | v _f [mm/min] | Q [cm ³ /min] |
|---------------------|---|------------------------|---------------------|---------------------|---------------------|------------------------|-------------------------|--------------------------|
| 6.00 | 4 | 132 | 0.080 | 13.000 | 0.450 | 7005 | 2242 | 13.1 |
| 8.00 | 4 | 132 | 0.106 | 19.000 | 0.600 | 5250 | 2226 | 25.4 |
| 10.00 | 4 | 132 | 0.133 | 23.000 | 0.750 | 4200 | 2234 | 38.5 |
| 12.00 | 4 | 132 | 0.159 | 27.000 | 0.900 | 3500 | 2226 | 54.1 |
| 16.00 | 4 | 132 | 0.173 | 32.000 | 1.200 | 2625 | 1817 | 69.8 |
| 20.00 | 4 | 132 | 0.222 | 40.000 | 1.500 | 2100 | 1865 | 111.9 |

Precise cutting data for other applications and materials can be found in the cutting data software ToolExpert




Corner radius end mills E-Cut



Smooth-edged, normal version, short neck

Base-X
B
 $l_2 = 2.2 \times d_1$
 $l_3 = 3.0 \times d_1$

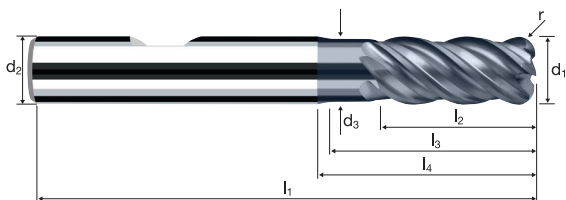
HM MG10 λ **43°**
 γ **6°**



Vario

new!



Roughing HDC **Roughing HPC** **Finishing**



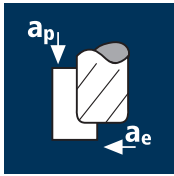
ReTool®

Rm < 850 **Rm 850-1100** **Rm 1100-1300** **Rm 1300-1500** **HRC 48-56** **Inox Stainless** **Ti Titanium** **GG(G) Tool Steel**

| Ø Code | d1 e8 | d2 h6 | d3 | l1 | l2 | l3 | l4 | r 0/+0.03 | α | z | POLYCHROM | |
|------------|-------|-------|-------|-----|-------|-------|-------|-----------|------|---|--------------------|-------------|
| | | | | | | | | | | | Example: Order-Nº. | Coating |
| | | | | | | | | | | | P | 8407 |
| | | | | | | | | | | | | 508 |
| 508 | 12.00 | 12.00 | 11.00 | 85 | 27.00 | 36.00 | 39.70 | 4.000 | 0.0° | 4 | | ● |
| 614 | 16.00 | 16.00 | 15.00 | 102 | 36.00 | 48.00 | 52.25 | 4.000 | 0.0° | 4 | | ● |
| 686 | 20.00 | 20.00 | 19.00 | 115 | 44.00 | 60.00 | 64.75 | 4.000 | 0.0° | 4 | | ● |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Application

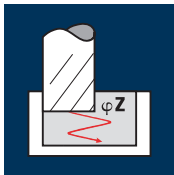
Material



Steel
< 850 N/mm²



| d_1 [mm] | z | v_c [m/min] | f_z [mm] | a_p [mm] | a_e [mm] | n [min ⁻¹] | v_f [mm/min] | Q [cm ³ /min] | φZ [°] |
|---------------|-----|------------------|---------------|---------------|---------------|-----------------------------|-------------------|-------------------------------|--------------------|
| 12.00 | 4 | 155 | 0.084 | 18.000 | 4.800 | 4110 | 1381 | 119.3 | 1.5° |
| 16.00 | 4 | 155 | 0.096 | 24.000 | 6.400 | 3085 | 1185 | 182.0 | 1.5° |
| 20.00 | 4 | 155 | 0.110 | 30.000 | 8.000 | 2465 | 1085 | 260.3 | 1.5° |



Steel
850 - 1100 N/mm²



| d_1 [mm] | z | v_c [m/min] | f_z [mm] | a_p [mm] | a_e [mm] | n [min ⁻¹] | v_f [mm/min] | Q [cm ³ /min] | φZ [°] |
|---------------|-----|------------------|---------------|---------------|---------------|-----------------------------|-------------------|-------------------------------|--------------------|
| 12.00 | 4 | 135 | 0.078 | 18.000 | 4.800 | 3580 | 1117 | 96.5 | 2.0° |
| 16.00 | 4 | 135 | 0.088 | 24.000 | 6.400 | 2685 | 945 | 145.2 | 2.0° |
| 20.00 | 4 | 135 | 0.100 | 30.000 | 8.000 | 2150 | 860 | 206.4 | 2.0° |

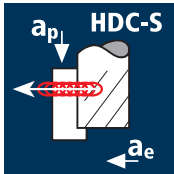
Inox normal
[Cr-Ni/1.4301]
[Cr-Ni-Mo/1.4571]



| d_1 [mm] | z | v_c [m/min] | f_z [mm] | a_p [mm] | a_e [mm] | n [min ⁻¹] | v_f [mm/min] | Q [cm ³ /min] | φZ [°] |
|---------------|-----|------------------|---------------|---------------|---------------|-----------------------------|-------------------|-------------------------------|--------------------|
| 12.00 | 4 | 90 | 0.054 | 18.000 | 4.800 | 2385 | 515 | 44.5 | 1.5° |
| 16.00 | 4 | 90 | 0.056 | 24.000 | 6.400 | 1790 | 401 | 61.6 | 1.5° |
| 20.00 | 4 | 90 | 0.070 | 30.000 | 8.000 | 1430 | 400 | 96.1 | 1.5° |

Application

Material



Steel
< 850 N/mm²



| d_1 [mm] | z | v_c [m/min] | f_z [mm] | a_p [mm] | a_e [mm] | n [min ⁻¹] | v_f [mm/min] | Q [cm ³ /min] |
|---------------|-----|------------------|---------------|---------------|---------------|-----------------------------|-------------------|-------------------------------|
| 12.00 | 4 | 243 | 0.207 | 27.000 | 1.200 | 6445 | 5337 | 172.9 |
| 16.00 | 4 | 243 | 0.228 | 32.000 | 1.600 | 4835 | 4410 | 225.8 |
| 20.00 | 4 | 243 | 0.286 | 40.000 | 2.000 | 3865 | 4422 | 353.7 |

Steel
850 - 1100 N/mm²



| d_1 [mm] | z | v_c [m/min] | f_z [mm] | a_p [mm] | a_e [mm] | n [min ⁻¹] | v_f [mm/min] | Q [cm ³ /min] |
|---------------|-----|------------------|---------------|---------------|---------------|-----------------------------|-------------------|-------------------------------|
| 12.00 | 4 | 216 | 0.207 | 27.000 | 1.200 | 5730 | 4744 | 153.7 |
| 16.00 | 4 | 216 | 0.228 | 32.000 | 1.600 | 4295 | 3917 | 200.6 |
| 20.00 | 4 | 216 | 0.286 | 40.000 | 2.000 | 3440 | 3935 | 314.8 |

Inox normal
[Cr-Ni/1.4301]
[Cr-Ni-Mo/1.4571]



| d_1 [mm] | z | v_c [m/min] | f_z [mm] | a_p [mm] | a_e [mm] | n [min ⁻¹] | v_f [mm/min] | Q [cm ³ /min] |
|---------------|-----|------------------|---------------|---------------|---------------|-----------------------------|-------------------|-------------------------------|
| 12.00 | 4 | 132 | 0.159 | 27.000 | 0.900 | 3500 | 2226 | 54.1 |
| 16.00 | 4 | 132 | 0.173 | 32.000 | 1.200 | 2625 | 1817 | 69.8 |
| 20.00 | 4 | 132 | 0.222 | 40.000 | 1.500 | 2100 | 1865 | 111.9 |



Precise cutting data for other applications and materials can be found in the cutting data software ToolExpert

