

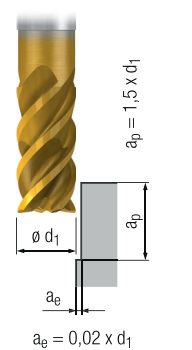
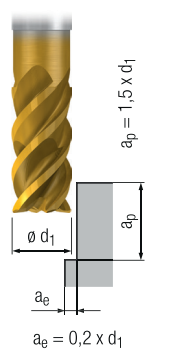
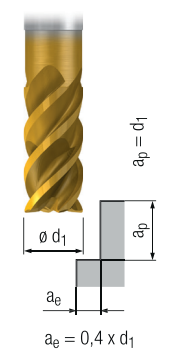
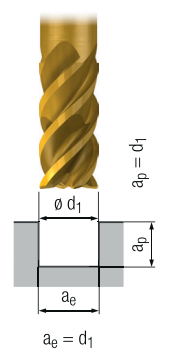
Schnittwerte für Hartmetall-Schafffräser „HPC“ – Lange Ausführung

Cutting Conditions for Solid Carbide End Mills “HPC” – Long Design

Valeurs de coupe pour fraises deux tailles en carbure monobloc «HPC» – version longue



N



Gültig für
Valid for
Valable pour
MED-HP4

| | V_c [m/min] | f_z [mm] | V_c [m/min] | f_z [mm] | V_c [m/min] | f_z [mm] | V_c [m/min] | f_z [mm] | | | | | |
|----------|------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| P | 1.1 | 160 | $0,005 \times d_1$ | 180 | $0,005 \times d_1$ | 190 | $0,005 \times d_1$ | 260 | $0,006 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.1 | 140 | $0,004 \times d_1$ | 150 | $0,004 \times d_1$ | 170 | $0,005 \times d_1$ | 220 | $0,005 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 3.1 | 120 | $0,004 \times d_1$ | 130 | $0,004 \times d_1$ | 140 | $0,004 \times d_1$ | 190 | $0,005 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 4.1 | 100 | $0,003 \times d_1$ | 110 | $0,003 \times d_1$ | 120 | $0,003 \times d_1$ | 160 | $0,004 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 5.1 | 80 | $0,003 \times d_1$ | 90 | $0,003 \times d_1$ | 100 | $0,003 \times d_1$ | 130 | $0,003 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| M | 1.1 | 80 | $0,003 \times d_1$ | 90 | $0,003 \times d_1$ | 100 | $0,003 \times d_1$ | 130 | $0,004 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.1 | 60 | $0,003 \times d_1$ | 70 | $0,003 \times d_1$ | 70 | $0,003 \times d_1$ | 100 | $0,004 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 3.1 | 50 | $0,002 \times d_1$ | 60 | $0,002 \times d_1$ | 60 | $0,002 \times d_1$ | 80 | $0,003 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 4.1 | 30 | $0,002 \times d_1$ | 30 | $0,002 \times d_1$ | 40 | $0,002 \times d_1$ | 50 | $0,003 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| K | 1.1 | 160 | $0,005 \times d_1$ | 180 | $0,005 \times d_1$ | 190 | $0,006 \times d_1$ | 260 | $0,006 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 1.2 | 160 | $0,005 \times d_1$ | 180 | $0,005 \times d_1$ | 190 | $0,006 \times d_1$ | 260 | $0,006 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.1 | 140 | $0,004 \times d_1$ | 150 | $0,004 \times d_1$ | 170 | $0,004 \times d_1$ | 220 | $0,005 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.2 | 140 | $0,004 \times d_1$ | 150 | $0,004 \times d_1$ | 170 | $0,004 \times d_1$ | 220 | $0,005 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 3.1 | 120 | $0,004 \times d_1$ | 130 | $0,004 \times d_1$ | 140 | $0,004 \times d_1$ | 190 | $0,005 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 3.2 | 120 | $0,004 \times d_1$ | 130 | $0,004 \times d_1$ | 140 | $0,004 \times d_1$ | 190 | $0,005 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 4.1 | 100 | $0,003 \times d_1$ | 110 | $0,003 \times d_1$ | 120 | $0,003 \times d_1$ | 160 | $0,004 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4.2 | 80 | $0,003 \times d_1$ | 90 | $0,003 \times d_1$ | 100 | $0,003 \times d_1$ | 130 | $0,004 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| N | 1.1 | | | | | | | | | | | | |
| | 1.2 | 720 | $0,008 \times d_1$ | 790 | $0,008 \times d_1$ | 860 | $0,009 \times d_1$ | 1150 | $0,010 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 1.3 | 720 | $0,007 \times d_1$ | 790 | $0,007 \times d_1$ | 860 | $0,008 \times d_1$ | 1150 | $0,009 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 1.4 | 430 | $0,008 \times d_1$ | 470 | $0,008 \times d_1$ | 520 | $0,009 \times d_1$ | 690 | $0,010 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 1.5 | | | | | | | | | | | | |
| | 1.6 | | | | | | | | | | | | |
| | 2.1 | 140 | $0,005 \times d_1$ | 150 | $0,005 \times d_1$ | 170 | $0,006 \times d_1$ | 220 | $0,006 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.2 | 140 | $0,005 \times d_1$ | 150 | $0,005 \times d_1$ | 170 | $0,006 \times d_1$ | 220 | $0,006 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.3 | 140 | $0,005 \times d_1$ | 150 | $0,005 \times d_1$ | 170 | $0,006 \times d_1$ | 220 | $0,006 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.4 | 130 | $0,004 \times d_1$ | 140 | $0,004 \times d_1$ | 160 | $0,004 \times d_1$ | 210 | $0,005 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.5 | 130 | $0,004 \times d_1$ | 140 | $0,004 \times d_1$ | 160 | $0,004 \times d_1$ | 210 | $0,005 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.6 | 130 | $0,004 \times d_1$ | 140 | $0,004 \times d_1$ | 160 | $0,004 \times d_1$ | 210 | $0,005 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.7 | 80 | $0,003 \times d_1$ | 90 | $0,003 \times d_1$ | 100 | $0,003 \times d_1$ | 130 | $0,004 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.8 | 80 | $0,003 \times d_1$ | 90 | $0,003 \times d_1$ | 100 | $0,003 \times d_1$ | 130 | $0,004 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 3.1 | 320 | $0,009 \times d_1$ | 350 | $0,009 \times d_1$ | 380 | $0,010 \times d_1$ | 510 | $0,011 \times d_1$ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 3.2 | 320 | $0,007 \times d_1$ | 350 | $0,007 \times d_1$ | 380 | $0,008 \times d_1$ | 510 | $0,009 \times d_1$ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4.1 | | | | | | | | | | | | | |
| 4.2 | | | | | | | | | | | | | |
| 4.3 | | | | | | | | | | | | | |
| 4.4 | | | | | | | | | | | | | |
| 5.1 | | | | | | | | | | | | | |
| 5.2 | 80 | $0,003 \times d_1$ | 90 | $0,003 \times d_1$ | 100 | $0,003 \times d_1$ | 130 | $0,004 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 5.3 | | | | | | | | | | | | | |
| S | 1.1 | 80 | $0,004 \times d_1$ | 90 | $0,004 \times d_1$ | 100 | $0,004 \times d_1$ | 130 | $0,004 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 1.2 | 60 | $0,003 \times d_1$ | 70 | $0,003 \times d_1$ | 70 | $0,003 \times d_1$ | 100 | $0,004 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 1.3 | 40 | $0,003 \times d_1$ | 40 | $0,003 \times d_1$ | 50 | $0,003 \times d_1$ | 60 | $0,003 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.1 | 60 | $0,002 \times d_1$ | 70 | $0,002 \times d_1$ | 70 | $0,002 \times d_1$ | 100 | $0,003 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.2 | 30 | $0,002 \times d_1$ | 30 | $0,002 \times d_1$ | 40 | $0,002 \times d_1$ | 50 | $0,003 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.3 | 18 | $0,002 \times d_1$ | 20 | $0,002 \times d_1$ | 20 | $0,002 \times d_1$ | 30 | $0,003 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 2.4 | 20 | $0,002 \times d_1$ | 20 | $0,002 \times d_1$ | 20 | $0,002 \times d_1$ | 30 | $0,003 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2.5 | 18 | $0,002 \times d_1$ | 20 | $0,002 \times d_1$ | 20 | $0,002 \times d_1$ | 30 | $0,003 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 2.6 | 20 | $0,002 \times d_1$ | 20 | $0,002 \times d_1$ | 20 | $0,002 \times d_1$ | 30 | $0,003 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| H | 1.1 | 100 | $0,003 \times d_1$ | 110 | $0,003 \times d_1$ | 120 | $0,003 \times d_1$ | 160 | $0,003 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 1.2 | 80 | $0,003 \times d_1$ | 90 | $0,003 \times d_1$ | 100 | $0,003 \times d_1$ | 130 | $0,003 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 1.3 | 70 | $0,002 \times d_1$ | 80 | $0,002 \times d_1$ | 80 | $0,002 \times d_1$ | 110 | $0,003 \times d_1$ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | 1.4 | | | | | | | | | | | | |
| | 1.5 | | | | | | | | | | | | |

V_c = Schnittgeschwindigkeit · Cutting speed · Vitesse de coupe
 f_z = Vorschub pro Zahn · Feed per tooth · Avance par dent

= sehr gut geeignet · very suitable · très approprié
 = gut geeignet · suitable · approprié