DIXI 1111

$$n \text{ [rpm]} = \frac{Vc \text{ [m/min] x 1000}}{\pi \times D_1 \text{ [mm]}}$$

$$Vf \text{ [mm/min]} = n \text{ [rpm] x } f \text{ [mm]}$$

Pecking cycle

		VDI 3323		CARBIDE Vc [m/min]	Q1
P	Unalloyed steel, leaded steel	1 - 5		40 - 70	<6×ØD1
N	Wrought aluminium alloy < 12% Si	21 - 22	n [rpm]	80 - 100	<6×ØD1
	Cast aluminium alloy >12% Si	23 - 25		40 - 70	<8×ØD1
	Copper alloy good machinability with Pb	26		80 - 130	<8×ØD1
	Copper alloy with difficult machinability	27 - 28	f [mm/rev]	70 - 110	<4×ØD1
	Gold, silver	-		50 - 80	<6×ØD1

Feed per revolution f [mm]

Ø D_1 0.08 - 0.30	Ø D_1 0.30 - 0.70	Ø D_1 0.70 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 3.00	Ø D_1 3.00 - 6.00	
0.0005 - 0.003	0.002 - 0.006	0.004 - 0.010	0.006 - 0.014	0.008 - 0.026	0.014 - 0.048	
0.0008 - 0.004	0.002 - 0.010	0.006 - 0.014	0.010 - 0.022	0.012 - 0.040	0.022 - 0.072	
0.0006 - 0.004	0.002 - 0.008	0.006 - 0.012	0.008 - 0.018	0.010 - 0.034	0.018 - 0.060	
0.0006 - 0.004	0.002 - 0.008	0.006 - 0.012	0.008 - 0.018	0.010 - 0.034	0.018 - 0.060	
0.0005 - 0.003	0.002 - 0.006	0.004 - 0.010	0.006 - 0.014	0.008 - 0.026	0.014 - 0.048	
0.0005 - 0.003	0.002 - 0.006	0.004 - 0.010	0.006 - 0.014	0.008 - 0.026	0.014 - 0.048	

Values based on cutting oil use. The cutting parameters are very strongly influenced by external parameters, such as tool and workpiece stability, etc.
The cutting conditions must be adapted to the operating conditions !