DIXI 1147

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

$$Vf\ [mm/min] = n\ [rpm] \times f\ [mm]$$

		VDI 3323		TiAlN Vc [m/min]	Pecking cycle Q1
P	Unalloyed steel, leaded steel	1 - 5		**70** - 100	<4×ØD1
P	Low alloyed steel < 800 N/mm²	6 - 9		**60** - 90	<4×ØD1
P	High-alloy steel > 800 N/mm², stainless steel ferr.- marten.	10 - 13		**40** - 70	<2×ØD1
M	Austenitic stainless steel < 700 N/mm²	14.1 - 14.2		**30** - 50	<0.5×ØD1
M	Nickel-free stainless steel / DUPLEX > 700 N/mm²	14.3 - 14.4		**20** - 40	<0.6×ØD1
K	Grey cast iron < 250 HB	15 - 16		**90** - 130	<4×ØD1
K	Ductile, malleable, nodular cast iron > 250 HB	17 - 20		**70** - 100	<2×ØD1
S	Refractory alloy, Fe, Ni, Co base	31 - 35		**15** - 30	<3×ØD1
S	Titanium, titanium alloy	36 - 37		**30** - 60	<0.5×ØD1

Feed per revolution f [mm]

Ø D_1 0.50 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00
0.030 - 0.082	0.062 - 0.124	0.080 - 0.145	0.090 - 0.190	0.110 - 0.260	0.150 - 0.290	0.160 - 0.310
0.028 - 0.074	0.054 - 0.110	0.072 - 0.130	0.080 - 0.170	0.100 - 0.230	0.140 - 0.260	0.140 - 0.280
0.028 - 0.074	0.054 - 0.110	0.072 - 0.130	0.080 - 0.170	0.100 - 0.230	0.140 - 0.260	0.140 - 0.280
0.012 - 0.030	0.022 - 0.044	0.030 - 0.050	0.030 - 0.070	0.040 - 0.090	0.060 - 0.100	0.060 - 0.110
0.010 - 0.026	0.020 - 0.040	0.026 - 0.045	0.030 - 0.060	0.040 - 0.080	0.050 - 0.090	0.050 - 0.100
0.034 - 0.092	0.068 - 0.138	0.090 - 0.160	0.100 - 0.210	0.130 - 0.290	0.170 - 0.320	0.180 - 0.350
0.026 - 0.070	0.052 - 0.104	0.066 - 0.120	0.080 - 0.160	0.100 - 0.220	0.130 - 0.240	0.130 - 0.260
0.008 - 0.024	0.018 - 0.034	0.022 - 0.040	0.030 - 0.050	0.030 - 0.070	0.040 - 0.080	0.040 - 0.090
0.012 - 0.032	0.024 - 0.048	0.032 - 0.055	0.040 - 0.070	0.040 - 0.100	0.060 - 0.110	0.060 - 0.120

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 !