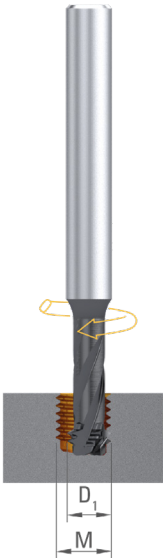


		VDI 3323		CARBIDE Vc [m/min]	CUTINOX Vc [m/min]
P	Unalloyed steel, leaded steel	1 - 5			150
	Low alloyed steel < 800 N/mm²	6 - 9			130
	High-alloy steel > 800 N/mm², stainless steel ferr.- marten.	10 - 13			120
M	Austenitic stainless steel < 700 N/mm²	14.1-14.2			70
	Nickel-free stainless steel/DUPLEX >700 N/mm²	14.3-14.4			50
K	Grey cast iron < 250 HB	15 - 16		150	150
	Ductile, malleable, nodular cast iron > 250 HB	17 - 20		120	110
N	Wrought aluminium alloy < 12% Si	21 - 22		200	
	Cast aluminium alloy >12% Si	23 - 25		180	
	Copper alloy good machinability with Pb	26		150	
	Copper alloy with difficult machinability	27 - 28		110	
	Plastic, wood	29 - 30		120	
	Gold, silver	-		140	
S	Refractory alloy, Fe, Ni, Co base	31 - 35		35	50
	Titanium, titanium alloy	36 - 37		55	

n [rpm] =

Vc [m/min] x 1000

π x D₁ [mm]

Feed per tooth fz [mm]							
Ø D ₁ 0.60 - 0.80	Ø D ₁ 0.80 - 1.10	Ø D ₁ 1.10 - 2.50	Ø D ₁ 2.50 - 3.00	Ø D ₁ 3.00 - 5.00	Ø D ₁ 5.00 - 6.50	Ø D ₁ 6.50 - 8.00	
0.007 - 0.010	0.010 - 0.013	0.013 - 0.029	0.030 - 0.034	0.034 - 0.055	0.055 - 0.070	0.070 - 0.085	
0.007 - 0.009	0.009 - 0.012	0.012 - 0.027	0.026 - 0.032	0.032 - 0.050	0.050 - 0.065	0.065 - 0.075	
0.006 - 0.008	0.008 - 0.011	0.011 - 0.024	0.024 - 0.028	0.028 - 0.045	0.045 - 0.060	0.060 - 0.070	
0.006 - 0.008	0.008 - 0.011	0.011 - 0.024	0.024 - 0.028	0.028 - 0.045	0.045 - 0.060	0.060 - 0.070	
0.005 - 0.007	0.007 - 0.010	0.010 - 0.022	0.022 - 0.026	0.026 - 0.040	0.040 - 0.055	0.055 - 0.065	
0.008 - 0.011	0.011 - 0.015	0.015 - 0.034	0.034 - 0.040	0.040 - 0.065	0.065 - 0.080	0.080 - 0.100	
0.007 - 0.010	0.010 - 0.013	0.013 - 0.029	0.030 - 0.034	0.034 - 0.055	0.055 - 0.070	0.070 - 0.085	
0.010 - 0.014	0.014 - 0.019	0.019 - 0.041	0.042 - 0.048	0.048 - 0.080	0.080 - 0.100	0.100 - 0.120	
0.009 - 0.012	0.012 - 0.017	0.017 - 0.037	0.036 - 0.042	0.042 - 0.070	0.070 - 0.090	0.090 - 0.105	
0.010 - 0.014	0.014 - 0.019	0.019 - 0.041	0.042 - 0.048	0.048 - 0.080	0.080 - 0.100	0.100 - 0.120	
0.008 - 0.011	0.011 - 0.015	0.015 - 0.034	0.034 - 0.040	0.040 - 0.065	0.065 - 0.080	0.080 - 0.100	
0.012 - 0.016	0.016 - 0.022	0.022 - 0.049	0.048 - 0.058	0.058 - 0.095	0.095 - 0.115	0.115 - 0.140	
0.007 - 0.010	0.010 - 0.013	0.013 - 0.029	0.030 - 0.034	0.034 - 0.055	0.055 - 0.070	0.070 - 0.085	
0.004 - 0.006	0.006 - 0.008	0.008 - 0.017	0.018 - 0.020	0.020 - 0.030	0.030 - 0.040	0.040 - 0.050	
0.007 - 0.010	0.010 - 0.013	0.013 - 0.029	0.030 - 0.034	0.034 - 0.055	0.055 - 0.070	0.070 - 0.085	

Values based on use of cutting oil and oil in emulsion.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 !