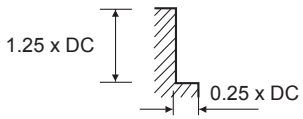
CUTTING DATA

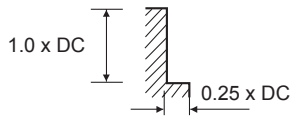
135323 (5 Flute)

VDI MATERIAL GROUP			HRc		Size (mm)								
					6.0	**8.0**	**10.0**	**12.0**	**14.0**	**16.0**	**18.0**	**20.0**	**25.0**
P	1-5	Non-alloy Steel	**<25**	v_c (m/min)	135	135	135	135	135	135	135	135	135
				n	7270	5450	4290	3630	3110	2720	2390	2180	1720
				f_z	0.034	0.038	0.06	0.063	0.069	0.076	0.082	0.089	0.09
				f (mm/min)	1240	1040	1030	1150	1080	1040	980	970	770
	6-9	Low alloy Steel	**25-35**	v_c (m/min)	135	135	135	135	135	135	135	135	135
				n	7270	5450	4290	3630	3110	2720	2390	2180	1720
				f_z	0.034	0.038	0.06	0.063	0.069	0.076	0.082	0.089	0.09
				f (mm/min)	1240	1040	1030	1150	1080	1040	980	970	770
M	12-13	Ferritic/ Martensitic Stainless Steel		v_c (m/min)	115	115	115	115	115	115	115	115	115
				n	6060	4540	3630	3030	2600	2270	2030	1810	1460
				f_z	0.03	0.032	0.038	0.063	0.065	0.069	0.072	0.076	0.077
				f (mm/min)	920	720	690	960	850	780	730	690	560
	14	Austenitic Stainless Steel		v_c (m/min)	105	105	105	105	105	105	105	105	105
				n	5660	4240	3390	3830	2420	2120	1850	1690	1340
				f_z	0.03	0.032	0.038	0.043	0.064	0.068	0.072	0.076	0.077
				f (mm/min)	860	670	640	820	770	720	670	640	510
K	15-20	Cast Iron		v_c (m/min)	135	135	135	135	135	135	135	135	135
				n	7270	5450	4360	3630	3110	2720	2390	2180	1720
				f_z	0.034	0.038	0.05	0.063	0.069	0.076	0.082	0.089	0.09
				f (mm/min)	1240	1040	1100	1150	1080	1040	980	970	770
S	31-35	HRSA Fe & Ni/Co Based		v_c (m/min)	25	25	25	25	25	25	25	25	25
				n	1450	1090	870	720	620	540	440	430	320
				f_z	0.017	0.02	0.025	0.036	0.045	0.048	0.054	0.06	0.062
				f (mm/min)	120	110	110	130	140	130	120	130	100
	36-37	Titanium/ Titanium Alloys		v_c (m/min)	85	85	85	85	85	85	85	85	85
				n	4440	3330	2660	220	1900	1660	1500	1330	1080
				f_z	0.03	0.031	0.038	0.05	0.057	0.063	0.069	0.075	0.078
				f (mm/min)	670	520	500	560	540	520	510	500	420

MATERIAL GROUPS P, M, K, S36-37



MATERIAL GROUP S31-35



Recommended cutting depths are **maximum** depths, and **speeds and feeds are a starting point** based on these depths.
All recommendations are based on ideal machining conditions. Adjustments may need to be made according to your set-up.
For long series and long necked tools it may be necessary to reduce feed rate by up to 50%.

v_c - cutting speed (m/min)
n - RPM (rev/min)
f_z - feed per tooth (mm)
f - feed rate (mm/min)
a_p - axial depth of cut
a_e - radial depth of cut