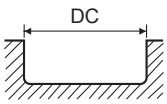
CUTTING DATA

120323, 121323 (2 Flute, Corner Radius)

VDI MATERIAL GROUP			HRc		Size (mm)							
					2.0	**3.0**	**4.0**	**5.0**	**6.0**	**8.0**	**10.0**	**12.0**
P	1-5	Non-alloy Steel	**<25**	v_c (m/min)	50	55	65	70	70	70	70	70
				n	7960	5835	5170	4455	3715	2785	2225	1855
				f_z	0.008	0.015	0.025	0.031	0.039	0.057	0.064	0.064
				f (mm/min)	150	175	260	275	290	315	285	240
	6-9	Low alloy Steel	**25-35**	v_c (m/min)	50	55	65	70	70	70	70	70
				n	7960	5835	5170	4455	3715	2785	2225	1855
				f_z	0.008	0.015	0.025	0.031	0.039	0.057	0.064	0.064
				f (mm/min)	150	175	260	275	290	315	285	240
M	12-13	Ferritic/ Martensitic Stainless Steel		v_c (m/min)	25	30	35	35	35	35	35	35
				n	3980	3180	2785	2225	1855	1390	1115	925
				f_z	0.009	0.016	0.025	0.031	0.04	0.053	0.059	0.058
				f (mm/min)	70	100	140	140	150	150	130	105
K	15-20	Cast Iron		v_c (m/min)	60	55	60	55	55	55	60	55
				n	9550	5835	4775	3500	2920	2185	1910	1460
				f_z	0.012	0.018	0.024	0.03	0.043	0.063	0.077	0.102
				f (mm/min)	230	210	230	210	250	275	295	300
N	21-24	Aluminium/ Aluminium Alloys		v_c (m/min)	140	145	140	145	145	145	145	140
				n	22280	15385	11140	9230	7690	5770	4615	3715
				f_z	0.01	0.015	0.021	0.025	0.032	0.043	0.053	0.065
				f (mm/min)	445	460	465	460	490	495	490	480
	26-27	Copper/ Copper Alloys		v_c (m/min)	105	105	110	105	105	110	105	105
				n	16710	11140	8755	6685	5570	4375	3340	2785
				f_z	0.01	0.015	0.019	0.025	0.033	0.043	0.055	0.066
				f (mm/min)	335	335	330	335	365	375	370	365

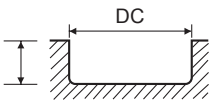
MATERIAL GROUPS P, M

< ø 3.0mm: 0.2 x DC
> ø 3.0mm: 0.5 x DC



MATERIAL GROUPS K, N

1.0 x DC



▸ The feed rate for long, long reach and uncoated tools should be reduced by up to 50%

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