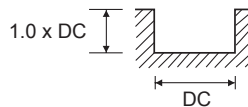


CUTTING DATA

301303, 301323, 302303, 302323 (2 Flute)															
VDI MATERIAL GROUP		HRc		Size (mm)											
				2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	20.0	
P	1-5	Non-alloy Steel	<25	v_c (m/min)	50	55	65	70	70	70	70	70	75	75	70
				n	7960	5835	5170	4455	3715	2785	2225	1855	1705	1490	1115
				f_z	0.008	0.015	0.025	0.031	0.039	0.057	0.064	0.064	0.063	0.062	0.063
		f (mm/min)	150	175	260	275	290	315	285	240	215	185	140		
	6-9	Low alloy Steel	25-35	v_c (m/min)	50	55	65	70	70	70	70	70	75	75	70
				n	7960	5835	5170	4455	3715	2785	2225	1855	1705	1490	1115
f_z				0.008	0.015	0.025	0.031	0.039	0.057	0.064	0.064	0.063	0.062	0.063	
	f (mm/min)	150	175	260	275	290	315	285	240	215	185	140			
M	12-13	Ferritic/ Martensitic Stainless Steel	v_c (m/min)	25	30	35	35	35	35	35	35	35	35	35	
			n	3980	3180	2785	2225	1855	1390	1115	925	795	695	555	
			f_z	0.009	0.016	0.025	0.031	0.04	0.053	0.059	0.058	0.059	0.068	0.064	
			f (mm/min)	70	100	140	140	150	150	130	105	95	95	70	
K	15-20	Cast Iron	v_c (m/min)	60	55	60	55	55	55	60	55	55	55	55	
			n	9550	5835	4775	3500	2920	2185	1910	1460	1250	1095	875	
			f_z	0.012	0.018	0.024	0.03	0.043	0.063	0.077	0.102	0.119	0.145	0.189	
			f (mm/min)	230	210	230	210	250	275	295	300	300	315	330	
N	21-24	Aluminium/ Aluminium Alloys	v_c (m/min)	140	145	140	145	145	145	145	140	145	145	140	
			n	22280	15385	11140	9230	7690	5770	4615	3715	3295	2885	2230	
			f_z	0.01	0.015	0.021	0.025	0.032	0.043	0.053	0.065	0.073	0.085	0.11	
		f (mm/min)	445	460	465	460	490	495	490	480	480	490	490		
	26-27	Copper/ Copper Alloys	v_c (m/min)	105	105	110	105	105	110	105	105	105	110	105	
			n	16710	11140	8755	6685	5570	4375	3340	2785	2385	2190	1670	
f_z			0.01	0.015	0.019	0.025	0.033	0.043	0.055	0.066	0.048	0.085	0.11		
	f (mm/min)	335	335	330	335	365	375	370	365	370	370	365			



► 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