

CUTTING DATA

124365 (4 Flute Long Length)												
VDI MATERIAL GROUP	MATERIAL	HRc		Size (mm)								
				1.0	1.5	2.0	2.5	3.0	4.0	5.0	6.0	
P	1-5	Non-alloy Steel	<25	v_c (m/min)	60	65	66	71	63	75	80	83
				n	19100	13800	10500	9040	6680	5970	5100	4400
				f_z	0.002	0.004	0.006	0.007	0.009	0.014	0.021	0.025
				f (mm/min)	150	220	250	250	240	330	430	440
	6-9	Low alloy Steel	25-35	v_c (m/min)	34	37	38	41	36	43	46	48
				n	10800	7850	6040	5220	3820	3420	2930	2540
				f_z	0.002	0.003	0.004	0.005	0.007	0.01	0.015	0.018
				f (mm/min)	85	95	100	105	105	135	175	180
	10-11	High alloy Steel, Tool Steel	35-45	v_c (m/min)	34	37	38	41	36	43	46	48
				n	10800	7850	6040	5220	3820	3420	2930	2540
				f_z	0.002	0.003	0.004	0.005	0.007	0.01	0.015	0.018
				f (mm/min)	85	95	100	105	105	135	175	180
K	15-20	Cast Iron	v_c (m/min)	60	65	66	71	63	75	80	83	
			n	19100	13800	10500	9040	6680	5970	5100	4400	
			f_z	0.002	0.004	0.006	0.007	0.009	0.014	0.021	0.025	
			f (mm/min)	150	220	250	250	240	330	430	440	
H	38	Hardened Steel	45-55	v_c (m/min)	21	23	24	25	22	27	30	31
				n	6685	4880	3820	3180	2330	2150	1910	1640
				f_z	0.001	0.002	0.004	0.005	0.006	0.008	0.011	0.014
				f (mm/min)	25	40	60	65	55	70	85	90
	40	Chilled Cast Iron		v_c (m/min)	34	37	38	41	36	43	46	48
				n	10800	7850	6040	5220	3820	3420	2930	2540
				f_z	0.002	0.003	0.004	0.005	0.007	0.01	0.015	0.018
				f (mm/min)	85	95	100	105	105	135	175	180
	41	Hardened Cast Iron		v_c (m/min)	21	23	24	25	22	27	30	31
				n	6685	4880	3820	3180	2330	2150	1910	1640
				f_z	0.001	0.002	0.004	0.005	0.006	0.008	0.011	0.014
				f (mm/min)	25	40	60	65	55	70	85	90

MATERIAL GROUP P, K, H40

MATERIAL GROUP H38, H41

► The data given is based on medium flute length tools. Please adjust machining conditions according to length.

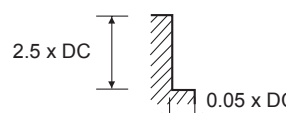
Recommended cutting depths are **maximum** depths, and **speeds and feeds are a starting point** based on these depths. All recommendations are based on ideal machining conditions. Adjustments may need to be made according to your set-up. **For long series and long necked tools** it may be necessary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

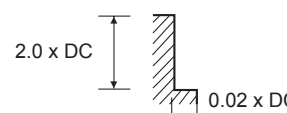
CUTTING DATA

124365 (4 Flute Long Length)											
VDI MATERIAL GROUP	MATERIAL	HRc		Size (mm)							
				8.0	10.0	12.0	14.0	16.0	20.0	25.0	
P	1-5	Non-alloy Steel	<25	v_c (m/min)	84	89	87	93	98	89	86
				n	3340	2830	2300	2110	1950	1410	1090
				f_z	0.041	0.049	0.04	0.041	0.042	0.048	0.042
				f (mm/min)	550	555	370	345	330	270	185
	6-9	Low alloy Steel	25-35	v_c (m/min)	48	52	52	54	54	52	64
				n	1910	1650	1380	1230	1070	830	810
				f_z	0.028	0.033	0.03	0.029	0.03	0.034	0.027
				f (mm/min)	215	220	165	140	130	115	90
	10-11	High alloy Steel, Tool Steel	35-45	v_c (m/min)	48	52	52	54	54	52	64
				n	1910	1650	1380	1230	1070	830	810
				f_z	0.028	0.033	0.03	0.029	0.03	0.034	0.027
				f (mm/min)	215	220	165	140	130	115	90
K	15-20	Cast Iron	v_c (m/min)	84	89	87	93	98	89	86	
			n	3340	2830	2300	2110	1950	1410	1090	
			f_z	0.041	0.049	0.04	0.041	0.042	0.048	0.042	
			f (mm/min)	550	555	370	345	330	270	185	
H	38	Hardened Steel	45-55	v_c (m/min)	32	32	32	33	34	31	39
				n	1270	1020	850	750	675	495	500
				f_z	0.022	0.027	0.021	0.021	0.022	0.028	0.023
				f (mm/min)	110	110	70	65	60	55	45
	40	Chilled Cast Iron	v_c (m/min)	48	52	52	54	54	52	64	
			n	1910	1650	1380	1230	1070	830	810	
			f_z	0.028	0.033	0.03	0.029	0.03	0.034	0.027	
			f (mm/min)	215	220	165	140	130	115	90	
	41	Hardened Cast Iron	v_c (m/min)	32	32	32	33	34	31	39	
			n	1270	1020	850	750	675	495	500	
			f_z	0.022	0.027	0.021	0.021	0.022	0.028	0.023	
			f (mm/min)	110	110	70	65	60	55	45	

MATERIAL GROUP P, K, H40



MATERIAL GROUP H38, H41



► The data given is based on medium flute length tools. Please adjust machining conditions according to length.

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