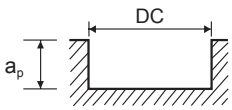
CUTTING DATA

118365 (2 Flute Long Length)

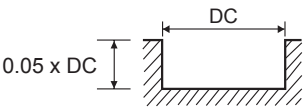
VDI MATERIAL GROUP		MATERIAL	HRc		Size (mm)										
					1.0	**1.5**	**2.0**	**2.5**	**3.0**	**4.0**	**5.0**	**6.0**	**8.0**	**10.0**	**12.0**
P	1-5	Non-alloy Steel	**<25**	v_c (m/min)	45	48	57	54	54	65	69	72	72	77	75
				n	14320	10100	9100	6800	5700	5170	4390	3820	2860	2450	1990
				f_z	0.002	0.003	0.005	0.005	0.008	0.012	0.017	0.002	0.028	0.039	0.033
				f (mm/min)	55	60	90	70	90	125	150	150	160	190	130
	6-9	Low alloy Steel	**25-35**	v_c (m/min)	36	38	46	44	44	52	55	57	57	63	63
				n	11450	8000	7300	5600	4670	4130	3500	3020	2260	2000	1670
				f_z	0.002	0.003	0.005	0.005	0.008	0.012	0.018	0.021	0.027	0.039	0.034
				f (mm/min)	45	50	70	70	75	100	125	130	120	150	115
	10-11	High alloy Steel, Tool Steel	**35-45**	v_c (m/min)	36	38	46	44	44	52	55	57	57	63	63
				n	11450	8000	7300	5600	4670	4130	3500	3020	2260	2000	1670
				f_z	0.002	0.003	0.005	0.005	0.008	0.012	0.018	0.021	0.027	0.039	0.034
				f (mm/min)	45	50	70	70	75	100	125	130	120	150	115
K	15-20	Cast Iron		v_c (m/min)	45	48	57	54	54	65	69	72	72	77	75
				n	14320	10100	9100	6800	5700	5170	4390	3820	2860	2450	1990
				f_z	0.002	0.003	0.005	0.005	0.008	0.012	0.017	0.002	0.028	0.039	0.033
				f (mm/min)	55	60	90	70	90	125	150	150	160	190	130
H	38	Hardened Steel	**45-55**	v_c (m/min)	23	24	29	27	27	32	36	37	38	38	38
				n	7300	5100	4610	3400	2860	2540	2290	1960	1510	1210	1000
				f_z	0.002	0.002	0.004	0.004	0.007	0.01	0.012	0.015	0.02	0.029	0.055
				f (mm/min)	30	20	35	25	40	50	55	60	60	70	45
	40	Chilled Cast Iron		v_c (m/min)	36	38	46	44	44	52	55	57	57	63	63
				n	11450	8000	7300	5600	4670	4130	3500	3020	2260	2000	1670
				f_z	0.002	0.003	0.005	0.005	0.008	0.012	0.018	0.021	0.027	0.039	0.034
				f (mm/min)	45	50	70	70	75	100	125	130	120	150	115
	41	Hardened Cast Iron		v_c (m/min)	23	24	29	27	27	32	36	37	38	38	38
				n	7300	5100	4610	3400	2860	2540	2290	1960	1510	1210	1000
				f_z	0.002	0.002	0.004	0.004	0.007	0.01	0.012	0.015	0.02	0.029	0.055
				f (mm/min)	30	20	35	25	40	50	55	60	60	70	45

MATERIAL GROUP P, K, H40

a_p : ø1.0mm - ø3.0mm = 0.4mm
a_p : ø4.0mm - ø12.0mm = 0.3 x DC



MATERIAL GROUP H38, H41



▸ The data given is based on medium flute length tools. Please adust 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