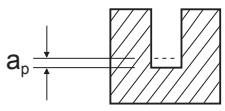
CUTTING DATA

120365 (2 Flute Extended Neck)

VDI MATERIAL GROUP		MATERIAL	HRc		Size (mm)							
					0.4 LU=3.0	**0.5** LU=4.0	**0.6** LU=4.0	**0.8** LU=4.0	**1.0** LU=10.0	**1.2** LU=6.0	**1.4** LU=6.0	**1.5** LU=10.0
P	1-5	Non-alloy Steel	**<25**	a_p (mm)	0.014	0.018	0.022	0.05	0.023	0.076	0.088	0.054
				v_c (m/min)	31	39	46	69	70	83	84	81
				n	24670	24800	24400	27450	22280	22000	19100	17180
				f_z	0.009	0.009	0.013	0.014	0.019	0.021	0.021	0.054
				f (mm/min)	445	445	635	770	845	925	800	720
	6-9	Low alloy Steel	**25-35**	a_p (mm)	0.011	0.014	0.017	0.039	0.018	0.059	0.069	0.042
				v_c (m/min)	29	36	44	65	66	78	80	77
				n	23070	22900	23300	25860	21000	20690	18180	16340
				f_z	0.007	0.007	0.009	0.012	0.017	0.017	0.016	0.016
				f (mm/min)	320	320	420	620	715	700	580	520
	10-11	High alloy Steel, Tool Steel	**35-45**	a_p (mm)	0.011	0.014	0.017	0.039	0.018	0.059	0.069	0.042
				v_c (m/min)	29	36	44	65	66	78	80	77
				n	23070	22900	23300	25860	21000	20690	18180	16340
				f_z	0.007	0.007	0.009	0.012	0.017	0.017	0.016	0.016
				f (mm/min)	320	320	420	620	715	700	580	520
K	15-20	Cast Iron		a_p (mm)	0.014	0.018	0.022	0.05	0.023	0.076	0.088	0.054
				v_c (m/min)	31	39	46	69	70	83	84	81
				n	24670	24800	24400	27450	22280	22000	19100	17180
				f_z	0.009	0.009	0.013	0.014	0.019	0.021	0.021	0.054
				f (mm/min)	445	445	635	770	845	925	800	720
H	38	Hardened Steel	**45-55**	a_p (mm)	0.008	0.01	0.012	0.028	0.013	0.042	0.049	0.03
				v_c (m/min)	26	32	39	57	58	69	70	68
				n	20700	20370	20690	22680	18460	18300	15910	14430
				f_z	0.005	0.01	0.008	0.04	0.015	0.013	0.013	0.013
				f (mm/min)	205	245	330	450	550	475	415	375
	40	Chilled Cast Iron		a_p (mm)	0.011	0.014	0.017	0.039	0.018	0.059	0.069	0.042
				v_c (m/min)	29	36	44	65	66	78	80	77
				n	23070	22900	23300	25860	21000	20690	18180	16340
				f_z	0.007	0.007	0.009	0.012	0.017	0.017	0.016	0.016
				f (mm/min)	320	320	420	620	715	700	580	520
	41	Hardened Cast Iron		a_p (mm)	0.008	0.01	0.012	0.028	0.013	0.042	0.049	0.03
				v_c (m/min)	26	32	39	57	58	69	70	68
				n	20700	20370	20690	22680	18460	18300	15910	14430
				f_z	0.005	0.01	0.008	0.04	0.015	0.013	0.013	0.013
				f (mm/min)	205	245	330	450	550	475	415	375



▸ The data given is based on LU length shown. Please adust machining conditions according to length.

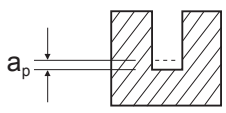
Recommended cutting depths are **maximum** depths, and **speeds and feeds are a starting point** based on these depths.
All recommendations are based on ideal machining conditions. Adjustments may need to be made according to your set-up.
For long series and long necked tools it may be necessary to reduce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

CUTTING DATA

120365 (2 Flute Extended Neck)

VDI MATERIAL GROUP		MATERIAL	HRc		Size (mm)						
					1.8 LU=10.0	**2.0** LU=12.0	**2.5** LU=12.0	**3.0** LU=16.0	**4.0** LU=20.0	**5.0** LU=35.0	**6.0** LU=20.0
P	1-5	Non-alloy Steel	**<25**	a_p (mm)	0.065	0.072	0.158	0.108	0.252	0.18	0.378
				v_c (m/min)	91	81	97	92	101	90	100
				n	16090	12900	12350	9760	8030	5730	5300
				f_z	0.021	0.026	0.039	0.035	0.081	0.81	0.1
				f (mm/min)	675	670	960	680	1300	930	1060
	6-9	Low alloy Steel	**25-35**	a_p (mm)	0.05	0.056	0.123	0.084	0.196	0.14	0.294
				v_c (m/min)	86	77	991	87	96	86	94
				n	15200	12250	11580	9230	7640	5470	4990
				f_z	0.018	0.02	0.029	0.026	0.076	0.066	0.082
				f (mm/min)	545	490	670	480	1160	720	815
	10-11	High alloy Steel, Tool Steel	**35-45**	a_p (mm)	0.05	0.056	0.123	0.084	0.196	0.14	0.294
				v_c (m/min)	86	77	991	87	96	86	94
				n	15200	12250	11580	9230	7640	5470	4990
				f_z	0.018	0.02	0.029	0.026	0.076	0.066	0.082
				f (mm/min)	545	490	670	480	1160	720	815
K	15-20	Cast Iron		a_p (mm)	0.065	0.072	0.158	0.108	0.252	0.18	0.378
				v_c (m/min)	91	81	97	92	101	90	100
				n	16090	12900	12350	9760	8030	5730	5300
				f_z	0.021	0.026	0.039	0.035	0.081	0.81	0.1
				f (mm/min)	675	670	960	680	1300	930	1060
H	38	Hardened Steel	**45-55**	a_p (mm)	0.036	0.04	0.088	0.06	0.14	0.1	0.21
				v_c (m/min)	75	68	81	56	84	76	86
				n	13260	10820	10310	5940	6680	4840	4400
				f_z	0.015	0.018	0.025	0.031	0.057	0.05	0.063
				f (mm/min)	395	390	515	365	760	485	555
	40	Chilled Cast Iron		a_p (mm)	0.05	0.056	0.123	0.084	0.196	0.14	0.294
				v_c (m/min)	86	77	991	87	96	86	94
				n	15200	12250	11580	9230	7640	5470	4990
				f_z	0.018	0.02	0.029	0.026	0.076	0.066	0.082
				f (mm/min)	545	490	670	480	1160	720	815
	41	Hardened Cast Iron		a_p (mm)	0.036	0.04	0.088	0.06	0.14	0.1	0.21
				v_c (m/min)	75	68	81	56	84	76	86
				n	13260	10820	10310	5940	6680	4840	4400
				f_z	0.015	0.018	0.025	0.031	0.057	0.05	0.063
				f (mm/min)	395	390	515	365	760	485	555



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v_c - cutting speed (m/min)
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