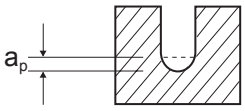
CUTTING DATA

106350, 109350 (2 Flute B/N Rib Processing)

VDI MATERIAL GROUP		MATERIAL	HRc		Size (mm)						
					0.1 LU=0.3	**0.2** LU=1.0	**0.3** LU=2.0	**0.4** LU=3.0	**0.5** LU=4.0	**0.6** LU=5.0	**0.8** LU=6.0
P	10-11	High alloy Steel, Tool Steel	**35-45**	a_p (mm)	0.01	0.01	0.013	0.022	0.017	0.02	0.04
				v_c (m/min)	15	31	46	61	65	65	66
				n	47770	49360	48830	48560	41400	34500	26270
				f_z	0.007	0.013	0.021	0.031	0.035	0.041	0.058
				f (mm/min)	665	1280	2050	3010	2895	2825	3045
H	38	Hardened Steel	**45-55**	a_p (mm)	0.009	0.009	0.011	0.018	0.014	0.017	0.032
				v_c (m/min)	15	31	46	51	52	53	53
				n	47770	49360	48830	40600	33120	28130	21095
				f_z	0.006	0.012	0.018	0.02	0.031	0.036	0.05
				f (mm/min)	570	1185	1755	1620	2050	2025	2110
	39	Hardened Steel	**55-70**	a_p (mm)	0.008	0.008	0.01	0.017	0.013	0.015	0.03
				v_c (m/min)	15	31	45	60	52	52	53
				n	47770	49360	47770	47770	33120	27600	21100
				f_z	0.005	0.01	0.017	0.018	0.027	0.03	0.044
				f (mm/min)	475	985	1620	1720	1785	1655	1855
	40	Chilled Cast Iron		a_p (mm)	0.01	0.01	0.013	0.022	0.017	0.02	0.04
				v_c (m/min)	15	31	46	61	65	65	66
				n	47770	49360	48830	48560	41400	34500	26270
				f_z	0.007	0.013	0.021	0.031	0.035	0.041	0.058
				f (mm/min)	665	1280	2050	3010	2895	2825	3045
	41	Hardened Cast Iron		a_p (mm)	0.009	0.009	0.011	0.018	0.014	0.017	0.032
				v_c (m/min)	15	31	46	51	52	53	53
				n	47770	49360	48830	40600	33120	28130	21095
				f_z	0.006	0.012	0.018	0.02	0.031	0.036	0.05
				f (mm/min)	570	1185	1755	1620	2050	2025	2110



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

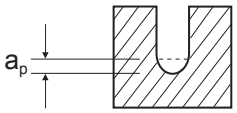
Recommended cutting depths are **maximum** depths, and **speeds and feeds are a starting point** based on these depths.
All recommendations are based on ideal machining conditions. Adjustments may need to be made according to your set-up.
For long series and long necked tools it may be necessary to reduce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

106350, 109350 (2 Flute B/N Rib Processing)

VDI MATERIAL GROUP		MATERIAL	HRc		Size (mm)					
					1.0 LU=8.0	**1.2** LU=8.0	**1.5** LU=12.0	**2.0** LU=14.0	**3.0** LU=18.0	**4.0** LU=30.0
P	10-11	High alloy Steel, Tool Steel	**35-45**	a_p (mm)	0.044	0.028	0.039	0.087	0.15	0.2
				v_c (m/min)	66	62	59	61	65	66
				n	21010	16450	12520	9710	6900	5250
				f_z	0.07	0.083	0.105	0.14	0.244	0.318
				f (mm/min)	2940	2730	2630	2720	3365	3340
H	38	Hardened Steel	**45-55**	a_p (mm)	0.036	0.023	0.032	0.075	0.12	0.16
				v_c (m/min)	51	49	50	52	52	52
				n	16240	13000	10615	8280	5520	4140
				f_z	0.061	0.078	0.095	0.12	0.223	0.29
				f (mm/min)	1980	2025	2015	1985	2460	2400
	39	Hardened Steel	**55-70**	a_p (mm)	0.033	0.021	0.029	0.069	0.084	0.15
				v_c (m/min)	51	49	50	52	52	51
				n	16240	13000	10610	8280	5520	4060
				f_z	0.057	0.07	0.084	0.1	0.21	0.265
				f (mm/min)	1850	1820	1780	1655	2315	2150
	40	Chilled Cast Iron		a_p (mm)	0.044	0.028	0.039	0.087	0.15	0.2
				v_c (m/min)	66	62	59	61	65	66
				n	21010	16450	12520	9710	6900	5250
				f_z	0.07	0.083	0.105	0.14	0.244	0.318
				f (mm/min)	2940	2730	2630	2720	3365	3340
	41	Hardened Cast Iron		a_p (mm)	0.036	0.023	0.032	0.075	0.12	0.16
				v_c (m/min)	51	49	50	52	52	52
				n	16240	13000	10615	8280	5520	4140
				f_z	0.061	0.078	0.095	0.12	0.223	0.29
				f (mm/min)	1980	2025	2015	1985	2460	2400



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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