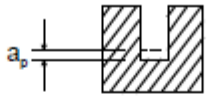
120365 (2 Flute Extended Neck)

MATERIAL GROUP		HARDNESS HRc		Size (mm)							
				0.4	0.5	0.6	0.8	1.0	1.2	1.4	1.5
P	13 14	< 35	a_p (mm)	0.009	0.011	0.008	0.018	0.023	0.027	0.032	0.054
			v_c (m/min)	31	39	41	62	62	66	76	81
			n	24660	24660	21920	24660	19680	17520	17280	17280
			f_z	0.009	0.009	0.011	0.013	0.017	0.017	0.019	0.021
			f (mm/min)	435	435	495	630	670	595	660	735
H	15 16	35-45	a_p (mm)	0.007	0.009	0.006	0.014	0.018	0.021	0.025	0.042
			v_c (m/min)	29	36	39	58	59	62	72	77
			n	23220	23220	20640	23220	18640	16560	16290	16290
			f_z	0.007	0.007	0.008	0.011	0.015	0.014	0.014	0.016
			f (mm/min)	310	345	350	490	570	460	460	515
	16 16	45-55	a_p (mm)	0.005	0.006	0.005	0.01	0.013	0.015	0.018	0.03
			v_c (m/min)	26	32	34	52	52	55	63	68
			n	20520	20520	18240	20520	16400	14560	14400	14400
			f_z	0.005	0.006	0.007	0.009	0.013	0.011	0.012	0.013
			f (mm/min)	225	230	260	365	425	310	345	385
K	31 32 33 34		a_p (mm)	0.009	0.011	0.008	0.018	0.023	0.027	0.032	0.054
			v_c (m/min)	31	39	41	62	62	66	76	81
			n	24660	24660	21920	24660	19680	17520	17280	17280
			f_z	0.009	0.009	0.011	0.013	0.017	0.017	0.019	0.021
			f (mm/min)	435	435	495	630	670	595	660	735



▶ The data shown is based on medial length tools. Please adjust machining conditions according to length.

v_c - cutting speed (m/min)
n - RPM (rev/min)
f_z - feed rate (mm/tooth)
f - feed rate (mm/rev)
z - No. of teeth
a_p - axial depth of cut
a_e - radial depth of cut

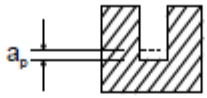
To calculate RPM from cutting speed: $n = \frac{v_c \times 1000}{\pi \times ø}$

To calculate cutting speed from RPM: $v_c = \frac{n \times \pi \times ø}{1000}$

All recommendations are based on ideal machining conditions. Adjustments may need to be made according to your set-up. The recommendations for speeds, feeds and other parameters presented in this chart are nominal recommendations and should be considered only as good starting points.

120365 (2 Flute Extended Neck)

MATERIAL GROUP		HARDNESS HRc		Size (mm)						
				1.8	2.0	2.5	3.0	4.0	5.0	6.0
P	13 14	< 35	a_p (mm)	0.065	0.045	0.056	0.108	0.144	0.18	0.378
			v_c (m/min)	91	72	87	92	90	90	100
			n	16020	11520	11070	9810	7200	5760	5300
			f_z	0.021	0.023	0.035	0.035	0.073	0.081	0.1
			f (mm/min)	680	525	785	695	1055	935	1055
H	15 16	35-45	a_p (mm)	0.05	0.035	0.044	0.084	0.112	0.14	0.284
			v_c (m/min)	86	68	82	87	86	86	94
			n	15120	10880	10440	9270	6840	5490	5000
			f_z	0.018	0.018	0.026	0.026	0.069	0.066	0.082
			f (mm/min)	530	395	550	490	940	730	820
	16 16	45-55	a_p (mm)	0.036	0.025	0.031	0.06	0.08	0.1	0.21
			v_c (m/min)	75	60	73	56	76	76	83
			n	13320	9600	9240	5940	6030	4860	4400
			f_z	0.015	0.016	0.022	0.031	0.052	0.05	0.063
			f (mm/min)	395	305	415	365	625	490	550
K	31 32 33 34		a_p (mm)	0.065	0.045	0.056	0.108	0.144	0.18	0.378
			v_c (m/min)	91	72	87	92	90	90	100
			n	16020	11520	11070	9810	7200	5760	5300
			f_z	0.021	0.023	0.035	0.035	0.073	0.081	0.1
			f (mm/min)	680	525	785	695	1055	935	1055



▶ The data shown is based on medial length tools. Please adjust machining conditions according to length.

v_c - cutting speed (m/min)
n - RPM (rev/min)
f_z - feed rate (mm/tooth)
f - feed rate (mm/rev)
z - No. of teeth
a_p - axial depth of cut
a_e - radial depth of cut

To calculate RPM from cutting speed: $n = \frac{v_c \times 1000}{\pi \times ø}$

To calculate cutting speed from RPM: $v_c = \frac{n \times \pi \times ø}{1000}$

All recommendations are based on ideal machining conditions. Adjustments may need to be made according to your set-up. The recommendations for speeds, feeds and other parameters presented in this chart are nominal recommendations and should be considered only as good starting points.