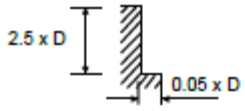
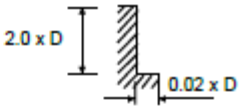
124365 (4 Flute Long Length)

MATERIAL GROUP		HARDNESS HRc		Size (mm)							
				1.0	1.5	2.0	2.5	3.0	4.0	5.0	6.0
P	13	< 35	v_c (m/min)	54	59	60	64	63	75	72	83
			n	17280	12420	9530	8090	6660	6000	4610	4420
	14		f_z	0.002	0.003	0.005	0.006	0.009	00014	0.019	0.025
			f (mm/min)	145	155	195	210	250	335	350	440
H	15	35-45	v_c (m/min)	31	33	34	37	36	43	41	48
			n	9850	7080	5440	4650	3860	3410	2610	2520
	16		f_z	0.002	0.002	0.004	0.005	0.007	0.01	0.013	0.018
			f (mm/min)	60	60	80	85	110	140	135	185
	15	45-55	v_c (m/min)	19	20	21	23	22	27	27	31
			n	6050	4350	3400	2890	2380	2150	1710	1640
	16		f_z	0.001	0.002	0.003	0.004	0.006	0.008	0.01	0.014
			f (mm/min)	30	60	45	50	60	70	70	90
K	31		v_c (m/min)	54	59	60	64	63	75	72	83
	32		n	17280	12420	9530	8090	6660	6000	4610	4420
	33		f_z	0.002	0.003	0.005	0.006	0.009	00014	0.019	0.025
	34		f (mm/min)	145	155	195	210	250	335	350	440

< HRc45



> HRc45



▶ 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: $n = \frac{v_c \times 1000}{\pi \times \varnothing}$

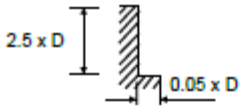
To calculate cutting speed from RPM: $v_c = \frac{n \times \pi \times \varnothing}{1000}$

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.

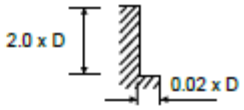
124365 (4 Flute Long Length)

MATERIAL GROUP		HARDNESS HRc		Size (mm)						
				8.0	10.0	12.0	14.0	16.0	20.0	25.0
P	13, 14	< 35	v_c (m/min)	84	89	87	93	98	89	86
			n	3360	2820	2300	2120	1940	1420	1100
			f_z	0.035	0.042	0.04	0.041	0.037	0.041	0.042
			f (mm/min)	470	470	365	345	290	235	185
H	15, 16	35-45	v_c (m/min)	48	52	52	54	54	52	64
			n	1900	1640	1390	1230	1070	820	820
			f_z	0.024	0.028	0.03	0.029	0.027	0.027	0.027
			f (mm/min)	185	185	165	145	115	90	90
	15, 16	45-55	v_c (m/min)	32	32	32	33	34	31	39
			n	1260	1010	840	760	640	500	500
			f_z	0.018	0.022	0.021	0.021	0.021	0.023	0.023
			f (mm/min)	90	90	70	65	55	45	45
K	31, 32, 33, 34		v_c (m/min)	84	89	87	93	98	89	86
			n	3360	2820	2300	2120	1940	1420	1100
			f_z	0.035	0.042	0.04	0.041	0.037	0.041	0.042
			f (mm/min)	470	470	365	345	290	235	185

< HRc45



> HRc45



▶ 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: $n = \frac{v_c \times 1000}{\pi \times \varnothing}$

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

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.