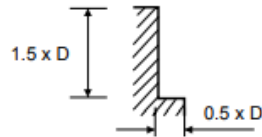


118102, 119102, 121102, 122102, 124102, 125102, 133102, 134102 (Multiflute Roughing)



MATERIAL GROUP	HRc		Size (mm)								
			6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	
P	11 12	< 20	v_c (m/min)	30	30	30	30	30	30	30	30
			n	1600	1100	900	800	700	560	500	450
			f_z	0.013	0.023	0.033	0.044	0.05	0.063	0.07	0.078
			f (mm/min)	60	75	120	140	140	140	140	140
	11 12	20-30	v_c (m/min)	25	25	25	25	25	25	25	25
			n	1200	900	800	630	560	450	400	400
			f_z	0.015	0.024	0.034	0.044	0.049	0.061	0.069	0.069
			f (mm/min)	55	65	110	110	110	110	110	110
	13 14	30-40	v_c (m/min)	15	15	15	15	15	15	15	15
			n	800	560	450	400	350	280	250	220
			f_z	0.013	0.021	0.033	0.044	0.05	0.063	0.07	0.08
			f (mm/min)	30	35	60	70	70	70	70	70
N	71 72 73	v_c (m/min)	85	80	80	75	80	80	80	75	
		n	4500	3100	2500	2000	1800	1600	1400	1200	
		f_z	0.015	0.025	0.035	0.05	0.058	0.07	0.084	0.104	
		f (mm/min)	200	230	350	400	420	450	470	500	

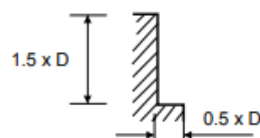


- ▶ The feed rate for long and long reach tools should be reduced by up to 50%
- ▶ The speeds and feeds for TiAlN coated tools can be increased by up to 30%

118102, 119102, 121102, 122102, 124102, 125102, 133102, 134102 (Multiflute Roughing)



MATERIAL GROUP	HRc		Size (mm)								
			22.0	25.0	28.0	30.0	32.0	36.0	40.0	50.0	
P	11 12	< 20	v_c (m/min)	30	30	30	30	30	30	30	30
			n	450	400	350	310	280	250	220	180
			f_z	0.076	0.085	0.076	0.086	0.095	0.107	0.114	0.157
			f (mm/min)	170	170	160	160	160	160	150	170
	11 12	20-30	v_c (m/min)	25	25	25	25	25	25	25	25
			n	350	310	280	250	220	200	180	160
			f_z	0.08	0.09	0.077	0.087	0.098	0.108	0.111	0.146
			f (mm/min)	140	140	130	130	130	130	120	140
	13 14	30-40	v_c (m/min)	15	15	15	15	15	15	15	15
			n	220	180	160	160	140	120	110	90
			f_z	0.077	0.094	0.089	0.089	0.101	0.118	0.121	0.148
			f (mm/min)	85	85	85	85	85	85	80	80
N	71 72 73	v_c (m/min)	75	80	80	85	80	80	80	80	
		n	1100	1000	900	900	800	700	630	500	
		f_z	0.085	0.09	0.094	0.098	0.104	0.112	0.119	0.123	
		f (mm/min)	470	450	510	530	500	470	450	370	



- ▶ The feed rate for long and long reach tools should be reduced by up to 50%
- ▶ The speeds and feeds for TiAlN coated tools can be increased by up to 30%