

ALU-XP CUTTING CONDITIONS

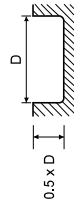


142303 (3 Flute 45° Helix, Corner Radius)

SLOTTING



MATERIAL GROUP	Size (mm)									
	3.0	4.0	5.0	6.0	8.0	10.0	12.0	16.0	20.0	
71	95	125	155	190	200	250	300	300	250	
72	10000	10000	10000	10000	8000	8000	8000	6000	4000	
73	0.039	0.05	0.055	0.066	0.096	0.117	0.145	0.174	0.22	
74	1160	1490	1650	1980	2310	2810	3470	3140	2640	

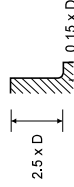


142303 (3 Flute 45° Helix, Corner Radius)

PROFILING



MATERIAL GROUP	Size (mm)									
	3.0	4.0	5.0	6.0	8.0	10.0	12.0	16.0	20.0	
71	95	10000	10000	10000	8000	8000	8000	6000	4000	
72	10000	10000	10000	10000	8000	8000	8000	6000	4000	
73	0.05	0.061	0.072	0.083	0.125	0.145	0.179	0.22	0.262	
74	1490	1820	2150	2480	3000	3470	4290	3960	3140	



v_c - cutting speed (m/min) To calculate RPM from cutting speed: $n = \frac{v_c \cdot 1000}{\pi \cdot \phi}$

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_r - radial depth of cut To calculate cutting speed from RPM: $v_c = \frac{n \cdot \pi \cdot \phi}{1000}$

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.

ALU-XP CUTTING CONDITIONS

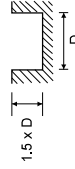


125103, 125303, 126103, 126303 (3 Flute Roughing)

SLOTTING



MATERIAL GROUP	Size (mm)									
	6.0	8.0	10.0	12.0	16.0	20.0				
71	200	200	205	320	322	320				
72	13500	10500	8500	8500	6400	5100				
73	0.168	0.168	0.169	0.165	0.167	0.163				
74	6800	5300	4300	4200	3200	2500				

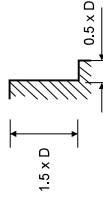


125103, 125303, 126103, 126303 (3 Flute Roughing)

PROFILING



MATERIAL GROUP	Size (mm)									
	6.0	8.0	10.0	12.0	16.0	20.0				
71	200	200	205	320	322	320				
72	13500	10500	8500	8500	6400	5100				
73	0.168	0.167	0.169	0.167	0.167	0.165				
74	5300	4000	3500	3200	2400	1900				



v_c - cutting speed (m/min) To calculate RPM from cutting speed: $n = \frac{v_c \cdot 1000}{\pi \cdot \phi}$

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

a_r - radial depth of cut

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.