

### ALUFLASH • SIDE MILLING AND SLOTTING • APPLICATION DATA • INCH

Material Group	Side Milling (A) and Slotting (B)			UNCOATED			Recommended feed per tooth (Fz = IPT) for side milling (A). For slotting (B), reduce Fz by 20%.													
	A		B	Cutting Speed – Vc SFM			D1 – Diameter													
	ap	ae	ap	min	Start	max	Fraction	1/8	5/32	3/16	1/4	5/16	3/8	1/2	9/16	5/8	23/32	3/4	1	
	<b>N</b>	1	Ap1 max	0,5 x D1	1 x D1	1500	1800	6000	IPT	.0009	.0017	.0022	.0026	.0035	.0043	.0052	.0060	.0069	.0078	.0087
	2	Ap1 max	0,5 x D1	1 x D1	1500	1800	4500	IPT	.0008	.0016	.0019	.0023	.0031	.0039	.0047	.0054	.0062	.0070	.0078	.0097
	3	Ap1 max	0,5 x D1	1 x D1	1500	1800	4500	IPT	.0006	.0012	.0015	.0018	.0024	.0030	.0036	.0042	.0048	.0054	.0061	.0076
	4	Ap1 max	0,5 x D1	1 x D1	1200	1350	2250	IPT	.0006	.0012	.0015	.0018	.0024	.0030	.0036	.0042	.0048	.0054	.0061	.0076
	5	Ap1 max	0,5 x D1	1 x D1	750	1200	3000	IPT	.0008	.0016	.0020	.0023	.0031	.0039	.0047	.0054	.0062	.0070	.0078	.0097

Material Group	Side Milling (A) and Slotting (B)			UNCOATED			Recommended feed per tooth (Fz = IPT) for side milling (A). For slotting (B), reduce Fz by 20%.													
	A		B	Cutting Speed – Vc SFM			D1 – Diameter													
	ap	ae	ap	min	Start	max	Fraction	1/8	5/32	3/16	1/4	5/16	3/8	1/2	9/16	5/8	23/32	3/4	1	
	<b>N</b>	1	Ap1 max	0,5 x D1	1 x D	1500	1800	6000	IPT	.0009	.0017	.0022	.0026	.0035	.0043	.0052	.0060	.0069	.0078	.0087
	2	Ap1 max	0,5 x D1	1 x D	1500	1800	4500	IPT	.0008	.0016	.0019	.0023	.0031	.0039	.0047	.0054	.0062	.0070	.0078	.0097
	3	Ap1 max	0,5 x D1	1 x D	1500	1800	4500	IPT	.0006	.0012	.0015	.0018	.0024	.0030	.0036	.0042	.0048	.0054	.0061	.0076
	4	Ap1 max	0,5 x D1	1 x D	1200	1350	2250	IPT	.0006	.0012	.0015	.0018	.0024	.0030	.0036	.0042	.0048	.0054	.0061	.0076
	5	Ap1 max	0,5 x D1	1 x D	750	1200	3000	IPT	.0008	.0016	.0020	.0023	.0031	.0039	.0047	.0054	.0062	.0070	.0078	.0097

**ALUFLASH • SIDE MILLING AND SLOTTING • APPLICATION DATA • METRIC**

Material Group																				
	Side Milling (A) and Slotting (B)			UNCOATED				Recommended feed per tooth (fz = mm/z) for side milling (A). For slotting (B), reduce fz by 20%.												
	A		B	Cutting Speed – Vc m/min				D1 – Diameter												
	ap	ae	ap	min	Start	max	mm	2.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	25.0	
N	1	Ap1 max	0,5 x D1	1 x D	500	600	2000	fz	0.022	0.044	0.055	0.066	0.088	0.110	0.132	0.153	0.176	0.198	0.220	0.275
	2	Ap1 max	0,5 x D1	1 x D	500	600	1500	fz	0.020	0.040	0.048	0.059	0.079	0.099	0.119	0.138	0.158	0.178	0.198	0.247
	3	Ap1 max	0,5 x D1	1 x D	500	600	1500	fz	0.015	0.031	0.038	0.046	0.062	0.077	0.092	0.107	0.123	0.138	0.154	0.192
	4	Ap1 max	0,5 x D1	1 x D	400	450	750	fz	0.015	0.031	0.038	0.046	0.062	0.077	0.092	0.107	0.123	0.138	0.154	0.192
	5	Ap1 max	0,5 x D1	1 x D	250	400	1000	fz	0.020	0.040	0.050	0.059	0.079	0.099	0.119	0.138	0.158	0.178	0.198	0.247

Material Group																				
	Side Milling (A) and Slotting (B)			UNCOATED				Recommended feed per tooth (fz = mm/z) for side milling (A). For slotting (B), reduce fz by 20%.												
	A		B	Cutting Speed – Vc m/min				D1 – Diameter												
	ap	ae	ap	min	Start	max	mm	2.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	25.0	
N	1	Ap1 max	0,5 x D1	1 x D	500	600	2000	fz	0.022	0.044	0.055	0.066	0.088	0.110	0.132	0.153	0.176	0.198	0.220	0.275
	2	Ap1 max	0,5 x D1	1 x D	500	600	1500	fz	0.020	0.040	0.048	0.059	0.079	0.099	0.119	0.138	0.158	0.178	0.198	0.247
	3	Ap1 max	0,5 x D1	1 x D	500	600	1500	fz	0.015	0.031	0.038	0.046	0.062	0.077	0.092	0.107	0.123	0.138	0.154	0.192
	4	Ap1 max	0,5 x D1	1 x D	400	450	750	fz	0.015	0.031	0.038	0.046	0.062	0.077	0.092	0.107	0.123	0.138	0.154	0.192
	5	Ap1 max	0,5 x D1	1 x D	250	400	1000	fz	0.020	0.040	0.050	0.059	0.079	0.099	0.119	0.138	0.158	0.178	0.198	0.247

### ALUFLASH • RAMPING 2FL • APPLICATION DATA • INCH

		Helical Interpolation / Ramping 0° - 15°			UNCOATED													
					Recommended feed per tooth (fz = IPT) for Helical Interpolation and Ramping													
		Cutting Speed – Vc SFM			Diameter – D1 [Ømin–Ømax]													
Material Group	Max Depth	min	Start	max	Fraction	1/8	5/32	3/16	1/4	5/16	3/8	1/2	9/16	5/8	23/32	3/4	1	
					Decimals	.180-.180	.297-.297	.356-.356	.475-.475	.594-.594	.713-.713	.950-.950	1.047-1.047	1.188-1.188	1.346-1.346	1.425-1.425	1.900-1.900	
N	1	1.25 x D1	1500	1800	6000	IPT	.0009	.0017	.0022	.0026	.0035	.0043	.0052	.0060	.0069	.0078	.0087	.0108
	2	1.25 x D1	1500	1800	4500	IPT	.0008	.0016	.0019	.0023	.0031	.0039	.0047	.0054	.0062	.0070	.0078	.0097
	3	1.25 x D1	1500	1800	4500	IPT	.0006	.0012	.0015	.0018	.0024	.0030	.0036	.0042	.0048	.0054	.0061	.0076
	4	1.25 x D1	1200	1350	2250	IPT	.0006	.0012	.0015	.0018	.0024	.0030	.0036	.0042	.0048	.0054	.0061	.0076
	5	1.25 x D1	750	1200	3000	IPT	.0008	.0016	.0020	.0023	.0031	.0039	.0047	.0054	.0062	.0070	.0078	.0097

		Helical Interpolation / Ramping 15° - 30°			UNCOATED													
					Recommended feed per tooth (fz = IPT) for Helical Interpolation and Ramping													
		Cutting Speed – Vc SFM			Diameter – D1 [Ømin–Ømax]													
Material Group	Max Depth	min	Start	max	Fraction	1/8	5/32	3/16	1/4	5/16	3/8	1/2	9/16	5/8	23/32	3/4	1	
					Decimals	.180-.180	.297-.297	.356-.356	.475-.475	.594-.594	.713-.713	.950-.950	1.047-1.047	1.188-1.188	1.346-1.346	1.425-1.425	1.900-1.900	
N	1	1.25 x D1	1500	1800	4800	IPT	.0006	.0013	.0016	.0019	.0026	.0032	.0039	.0045	.0052	.0058	.0065	.0081
	2	1.25 x D1	1500	1800	3600	IPT	.0006	.0012	.0014	.0018	.0023	.0029	.0035	.0041	.0047	.0053	.0058	.0073
	3	1.25 x D1	1500	1800	3600	IPT	.0005	.0009	.0011	.0014	.0018	.0023	.0027	.0032	.0036	.0041	.0045	.0057
	4	1.25 x D1	1200	1350	1800	IPT	.0005	.0009	.0011	.0014	.0018	.0023	.0027	.0032	.0036	.0041	.0045	.0057
	5	1.25 x D1	750	1200	2400	IPT	.0006	.0012	.0015	.0018	.0023	.0029	.0035	.0041	.0047	.0053	.0058	.0073

		Helical Interpolation / Ramping 30° - 45°			UNCOATED													
					Recommended feed per tooth (fz = IPT) for Helical Interpolation and Ramping													
		Cutting Speed – Vc SFM			Diameter – D1 [Ømin–Ømax]													
Material Group	Max Depth	min	Start	max	Fraction	1/8	5/32	3/16	1/4	5/16	3/8	1/2	9/16	5/8	23/32	3/4	1	
					Decimals	.180-.180	.297-.297	.356-.356	.475-.475	.594-.594	.713-.713	.950-.950	1.047-1.047	1.188-1.188	1.346-1.346	1.425-1.425	1.900-1.900	
N	1	1.25 x D1	1260	1500	2400	IPT	.0005	.0010	.0013	.0016	.0021	.0026	.0031	.0036	.0042	.0047	.0052	.0065
	2	1.25 x D1	1260	1500	2400	IPT	.0005	.0009	.0011	.0014	.0019	.0023	.0028	.0033	.0037	.0042	.0047	.0058
	3	1.25 x D1	1260	1500	2400	IPT	.0004	.0007	.0009	.0011	.0015	.0018	.0022	.0025	.0029	.0033	.0036	.0045
	4	1.25 x D1	1020	1140	1350	IPT	.0004	.0007	.0009	.0011	.0015	.0018	.0022	.0025	.0029	.0033	.0036	.0045
	5	1.25 x D1	630	1020	1800	IPT	.0005	.0009	.0012	.0014	.0019	.0023	.0028	.0033	.0037	.0042	.0047	.0058

**ALUFLASH • RAMPING 2FL • APPLICATION DATA • METRIC**

Material Group	Helical Interpolation / Ramping 0° - 15°																	
		UNCOATED			Recommended feed per tooth (fz = mm/z) for Helical Interpolation and Ramping													
		Cutting Speed – Vc m/min			Diameter – D1 [Ømin–Ømax]													
		Max Depth	min	Start	max	mm	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	25.0
				mm	2.5-4.8	4.6-7.6	5.8-9.5	6.9-11.4	9.2-15.2	11.5-19.0	13.8-22.8	16.1-26.6	18.4-30.4	20.7-34.2	23.0-38.0	28.8-47.5		
N	1	1,25 x D1	500	600	2000	fz	0.022	0.044	0.055	0.066	0.088	0.110	0.132	0.153	0.176	0.198	0.220	0.275
	2	1,25 x D1	500	600	1500	fz	0.020	0.040	0.048	0.059	0.079	0.099	0.119	0.138	0.158	0.178	0.198	0.247
	3	1,25 x D1	500	600	1500	fz	0.015	0.031	0.038	0.046	0.062	0.077	0.092	0.107	0.123	0.138	0.154	0.192
	4	1,25 x D1	400	450	750	fz	0.015	0.031	0.038	0.046	0.062	0.077	0.092	0.107	0.123	0.138	0.154	0.192
	5	1,25 x D1	250	400	1000	fz	0.020	0.040	0.050	0.059	0.079	0.099	0.119	0.138	0.158	0.178	0.198	0.247

Material Group	Helical Interpolation / Ramping 15° - 30°																	
		UNCOATED			Recommended feed per tooth (fz = mm/z) for Helical Interpolation and Ramping													
		Cutting Speed – Vc m/min			Diameter – D1 [Ømin–Ømax]													
		Max Depth	min	Start	max	mm	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	25.0
				mm	2.5-4.8	4.6-7.6	5.8-9.5	6.9-11.4	9.2-15.2	11.5-19.0	13.8-22.8	16.1-26.6	18.4-30.4	20.7-34.2	23.0-38.0	28.8-47.5		
N	1	1,25 x D1	500	600	1600	fz	0.017	0.033	0.041	0.050	0.066	0.082	0.099	0.115	0.132	0.148	0.165	0.206
	2	1,25 x D1	500	600	1200	fz	0.015	0.030	0.036	0.045	0.059	0.074	0.089	0.104	0.119	0.134	0.148	0.185
	3	1,25 x D1	500	600	1200	fz	0.012	0.023	0.029	0.035	0.046	0.058	0.069	0.080	0.092	0.104	0.115	0.144
	4	1,25 x D1	400	450	600	fz	0.012	0.023	0.029	0.035	0.046	0.058	0.069	0.080	0.092	0.104	0.115	0.144
	5	1,25 x D1	250	400	800	fz	0.015	0.030	0.038	0.045	0.059	0.074	0.089	0.104	0.119	0.134	0.148	0.185

Material Group	Helical Interpolation / Ramping 30° - 45°																	
		UNCOATED			Recommended feed per tooth (fz = mm/z) for Helical Interpolation and Ramping													
		Cutting Speed – Vc m/min			Diameter – D1 [Ømin–Ømax]													
		Max Depth	min	Start	max	mm	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	25.0
				mm	2.5-4.8	4.6-7.6	5.8-9.5	6.9-11.4	9.2-15.2	11.5-19.0	13.8-22.8	16.1-26.6	18.4-30.4	20.7-34.2	23.0-38.0	28.8-47.5		
N	1	1,25 x D1	420	500	800	fz	0.013	0.026	0.033	0.040	0.053	0.066	0.079	0.092	0.106	0.119	0.132	0.165
	2	1,25 x D1	420	500	800	fz	0.012	0.024	0.029	0.036	0.048	0.059	0.071	0.083	0.095	0.107	0.119	0.148
	3	1,25 x D1	420	500	800	fz	0.009	0.018	0.023	0.028	0.037	0.046	0.055	0.064	0.074	0.083	0.092	0.115
	4	1,25 x D1	340	380	450	fz	0.009	0.018	0.023	0.028	0.037	0.046	0.055	0.064	0.074	0.083	0.092	0.115
	5	1,25 x D1	210	340	600	fz	0.012	0.024	0.030	0.036	0.048	0.059	0.071	0.083	0.095	0.107	0.119	0.148

### ALUFLASH • RAMPING 3FL • APPLICATION DATA • INCH

		Helical Interpolation / Ramping 0° - 15°			UNCOATED													
		Cutting Speed – Vc m/min			Recommended feed per tooth (fz = IPT) for Helical Interpolation and Ramping – fz x 1													
					Diameter – D1 [Ømin–Ømax]													
Material Group	Max Depth	min	Start	max	Fraction	1/8	5/32	3/16	1/4	5/16	3/8	1/2	9/16	5/8	23/32	3/4	1	
					Decimals	.180-	.180-	.216-	.288-	.359-	.431-	.575-	.633-	.719-	.814-	.863-	1.150-	
N	1	1.25 x D1	1500	1800	6000	IPT	.0009	.0017	.0022	.0026	.0035	.0043	.0052	.0060	.0069	.0078	.0087	.0108
	2	1.25 x D1	1500	1800	4500	IPT	.0008	.0016	.0019	.0023	.0031	.0039	.0047	.0054	.0062	.0070	.0078	.0097
	3	1.25 x D1	1500	1800	4500	IPT	.0006	.0012	.0015	.0018	.0024	.0030	.0036	.0042	.0048	.0054	.0061	.0076
	4	1.25 x D1	1200	1350	2250	IPT	.0006	.0012	.0015	.0018	.0024	.0030	.0036	.0042	.0048	.0054	.0061	.0076
	5	1.25 x D1	750	1200	3000	IPT	.0008	.0016	.0020	.0023	.0031	.0039	.0047	.0054	.0062	.0070	.0078	.0097

		Helical Interpolation / Ramping 15° - 30°			UNCOATED													
		Cutting Speed – Vc m/min			Recommended feed per tooth (fz = IPT) for Helical Interpolation and Ramping – fz x 1													
					Diameter – D1 [Ømin–Ømax]													
Material Group	Max Depth	min	Start	max	Fraction	1/8	5/32	3/16	1/4	5/16	3/8	1/2	9/16	5/8	23/32	3/4	1	
					Decimals	.180-	.180-	.216-	.288-	.359-	.431-	.575-	.633-	.719-	.814-	.863-	1.150-	
N	1	1.25 x D1	1500	1800	4800	IPT	.0006	.0013	.0016	.0019	.0026	.0032	.0039	.0045	.0052	.0058	.0065	.0081
	2	1.25 x D1	1500	1800	3600	IPT	.0006	.0012	.0014	.0018	.0023	.0029	.0035	.0041	.0047	.0053	.0058	.0073
	3	1.25 x D1	1500	1800	3600	IPT	.0005	.0009	.0011	.0014	.0018	.0023	.0027	.0032	.0036	.0041	.0045	.0057
	4	1.25 x D1	1200	1350	1800	IPT	.0005	.0009	.0011	.0014	.0018	.0023	.0027	.0032	.0036	.0041	.0045	.0057
	5	1.25 x D1	750	1200	2400	IPT	.0006	.0012	.0015	.0018	.0023	.0029	.0035	.0041	.0047	.0053	.0058	.0073

		Helical Interpolation / Ramping 30° - 45°			UNCOATED													
		Cutting Speed – Vc m/min			Recommended feed per tooth (fz = IPT) for Helical Interpolation and Ramping – fz x 1													
					Diameter – D1 [Ømin–Ømax]													
Material Group	Max Depth	min	Start	max	Fraction	1/8	5/32	3/16	1/4	5/16	3/8	1/2	9/16	5/8	23/32	3/4	1	
					Decimals	.180-	.180-	.216-	.288-	.359-	.431-	.575-	.633-	.719-	.814-	.863-	1.150-	
N	1	1.25 x D1	1260	1500	2400	IPT	.0005	.0010	.0013	.0016	.0021	.0026	.0031	.0036	.0042	.0047	.0052	.0065
	2	1.25 x D1	1260	1500	2400	IPT	.0005	.0009	.0011	.0014	.0019	.0023	.0028	.0033	.0037	.0042	.0047	.0058
	3	1.25 x D1	1260	1500	2400	IPT	.0004	.0007	.0009	.0011	.0015	.0018	.0022	.0025	.0029	.0033	.0036	.0045
	4	1.25 x D1	1020	1140	1350	IPT	.0004	.0007	.0009	.0011	.0015	.0018	.0022	.0025	.0029	.0033	.0036	.0045
	5	1.25 x D1	630	1020	1800	IPT	.0005	.0009	.0012	.0014	.0019	.0023	.0028	.0033	.0037	.0042	.0047	.0058

## ALUFLASH • RAMPING 3FL • APPLICATION DATA • METRIC

Material Group	Max Depth	Helical Interpolation / Ramping 0° - 15°																
		UNCOATED			Recommended feed per tooth (fz = mm/z) for Helical Interpolation and Ramping – fz x 1													
		Cutting Speed – Vc m/min			Diameter – D1 [Ømin–Ømax]													
		min	Start	max	mm	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	25.0	
			mm	2.5-4.8	4.6-7.6	5.8-9.5	6.9-11.4	9.2-15.2	11.5-19.0	13.8-22.8	16.1-26.6	18.4-30.4	20.7-34.2	23.0-38.0	28.8-47.5			
N	1	1,25 x D1	500	600	2000	fz	0.022	0.044	0.055	0.066	0.088	0.110	0.132	0.153	0.176	0.198	0.220	0.275
	2	1,25 x D1	500	600	1500	fz	0.020	0.040	0.048	0.059	0.079	0.099	0.119	0.138	0.158	0.178	0.198	0.247
	3	1,25 x D1	500	600	1500	fz	0.015	0.031	0.038	0.046	0.062	0.077	0.092	0.107	0.123	0.138	0.154	0.192
	4	1,25 x D1	400	450	750	fz	0.015	0.031	0.038	0.046	0.062	0.077	0.092	0.107	0.123	0.138	0.154	0.192
	5	1,25 x D1	250	400	1000	fz	0.020	0.040	0.050	0.059	0.079	0.099	0.119	0.138	0.158	0.178	0.198	0.247

Material Group	Max Depth	Helical Interpolation / Ramping 15° - 30°																
		UNCOATED			Recommended feed per tooth (fz = mm/z) for Helical Interpolation and Ramping – fz x 1													
		Cutting Speed – Vc m/min			Diameter – D1 [Ømin–Ømax]													
		min	Start	max	mm	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	25.0	
			mm	2.5-4.8	4.6-7.6	5.8-9.5	6.9-11.4	9.2-15.2	11.5-19.0	13.8-22.8	16.1-26.6	18.4-30.4	20.7-34.2	23.0-38.0	28.8-47.5			
N	1	1,25 x D1	500	600	1600	fz	0.017	0.033	0.041	0.050	0.066	0.082	0.099	0.115	0.132	0.148	0.165	0.206
	2	1,25 x D1	500	600	1200	fz	0.015	0.030	0.036	0.045	0.059	0.074	0.089	0.104	0.119	0.134	0.148	0.185
	3	1,25 x D1	500	600	1200	fz	0.012	0.023	0.029	0.035	0.046	0.058	0.069	0.080	0.092	0.104	0.115	0.144
	4	1,25 x D1	400	450	600	fz	0.012	0.023	0.029	0.035	0.046	0.058	0.069	0.080	0.092	0.104	0.115	0.144
	5	1,25 x D1	250	400	800	fz	0.015	0.030	0.038	0.045	0.059	0.074	0.089	0.104	0.119	0.134	0.148	0.185

Material Group	Max Depth	Helical Interpolation / Ramping 30° - 45°																
		UNCOATED			Recommended feed per tooth (fz = mm/z) for Helical Interpolation and Ramping – fz x 1													
		Cutting Speed – Vc m/min			Diameter – D1 [Ømin–Ømax]													
		min	Start	max	mm	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	25.0	
			mm	2.5-4.8	4.6-7.6	5.8-9.5	6.9-11.4	9.2-15.2	11.5-19.0	13.8-22.8	16.1-26.6	18.4-30.4	20.7-34.2	23.0-38.0	28.8-47.5			
N	1	1,25 x D1	420	500	800	fz	0.013	0.026	0.033	0.040	0.053	0.066	0.079	0.092	0.106	0.119	0.132	0.165
	2	1,25 x D1	420	500	800	fz	0.012	0.024	0.029	0.036	0.048	0.059	0.071	0.083	0.095	0.107	0.119	0.148
	3	1,25 x D1	420	500	800	fz	0.009	0.018	0.023	0.028	0.037	0.046	0.055	0.064	0.074	0.083	0.092	0.115
	4	1,25 x D1	340	380	450	fz	0.009	0.018	0.023	0.028	0.037	0.046	0.055	0.064	0.074	0.083	0.092	0.115
	5	1,25 x D1	210	340	600	fz	0.012	0.024	0.030	0.036	0.048	0.059	0.071	0.083	0.095	0.107	0.119	0.148

### ALUFLASH • PLUNGING • APPLICATION DATA • INCH

		Plunging/Drilling		UNCOATED			Recommended feed per revolution (fn =IPR) for Plunging 2 flute end mills													
				Cutting Speed – Vc SFM			D1 – Diameter													
Material Group	Max Depth	Applicable	Coolant	min	Start	max	Fraction	1/8	5/32	3/16	1/4	5/16	3/8	1/2	9/16	5/8	23/32	3/4	1	
N	1	1.5 x D	●	Required	360	780	1200	IPR	.0031	.0047	.0053	.0059	.0063	.0079	.0087	.0093	.0098	.0104	.0110	.0118
	2	1.5 x D	●	Required	360	750	840	IPR	.0031	.0047	.0053	.0059	.0063	.0079	.0087	.0093	.0098	.0104	.0110	.0118
	3	1.5 x D	●	Required	300	600	780	IPR	.0031	.0047	.0053	.0059	.0063	.0079	.0087	.0093	.0098	.0104	.0110	.0118
	4	1 x D	●	Required	180	450	780	IPR	.0024	.0031	.0039	.0047	.0055	.0063	.0079	.0083	.0087	.0093	.0098	.0110
	5	1.5 x D	●	Required	180	600	1200	IPR	.0031	.0047	.0053	.0059	.0063	.0079	.0087	.0093	.0098	.0104	.0110	.0118

		Plunging/Drilling		UNCOATED			Recommended feed per revolution (fn =IPR) for Plunging 3 flute end mills													
				Cutting Speed – Vc SFM			D1 – Diameter													
Material Group	Max Depth	Applicable	Coolant	min	Start	max	Fraction	1/8	5/32	3/16	1/4	5/16	3/8	1/2	9/16	5/8	23/32	3/4	1	
N	1	1.5 x D	●	Required	360	780	1200	IPR	.0022	.0033	.0037	.0041	.0044	.0055	.0061	.0065	.0069	.0073	.0077	.0083
	2	1.5 x D	●	Required	360	750	840	IPR	.0022	.0033	.0037	.0041	.0044	.0055	.0061	.0065	.0069	.0073	.0077	.0083
	3	1.5 x D	●	Required	300	600	780	IPR	.0022	.0033	.0037	.0041	.0044	.0055	.0061	.0065	.0069	.0073	.0077	.0083
	4	1 x D	●	Required	180	450	780	IPR	.0017	.0022	.0028	.0033	.0039	.0044	.0055	.0058	.0061	.0065	.0069	.0077
	5	1.5 x D	●	Required	180	600	1200	IPR	.0022	.0033	.0037	.0041	.0044	.0055	.0061	.0065	.0069	.0073	.0077	.0083

**ALUFLASH • PLUNGING • APPLICATION DATA • METRIC**

		Plunging/Drilling		UNCOATED			Recommended feed per revolution (fn =mm/rev) for Plunging 2 flute end mills															
				Cutting Speed – Vc m/min			D1 – Diameter															
Material Group	Max Depth	Applicable	Coolant	min	Start	max	mm	2.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	25.0			
N	1	1,5 x D	●	Required	120	260	400	fn	0.080	0.120	0.135	0.150	0.160	0.200	0.220	0.235	0.250	0.265	0.280	0.300		
	2	1,5 x D	●	Required	120	250	280	fn	0.080	0.120	0.135	0.150	0.160	0.200	0.220	0.235	0.250	0.265	0.280	0.300		
	3	1,5 x D	●	Required	100	200	260	fn	0.080	0.120	0.135	0.150	0.160	0.200	0.220	0.235	0.250	0.265	0.280	0.300		
	4	1 x D	●	Required	60	150	260	fn	0.060	0.080	0.100	0.120	0.140	0.160	0.200	0.210	0.220	0.235	0.250	0.280		
	5	1,5 x D	●	Required	60	200	400	fn	0.080	0.120	0.135	0.150	0.160	0.200	0.220	0.235	0.250	0.265	0.280	0.300		

		Plunging/Drilling		UNCOATED			Recommended feed per revolution (fn =mm/rev) for Plunging 3 flute end mills															
				Cutting Speed – Vc m/min			D1 – Diameter															
Material Group	Max Depth	Applicable	Coolant	min	Start	max	mm	2.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	25.0			
N	1	1,5 x D	●	Required	120	260	400	fn	0.056	0.084	0.095	0.105	0.112	0.140	0.154	0.165	0.175	0.186	0.196	0.210		
	2	1,5 x D	●	Required	120	250	280	fn	0.056	0.084	0.095	0.105	0.112	0.140	0.154	0.165	0.175	0.186	0.196	0.210		
	3	1,5 x D	●	Required	100	200	260	fn	0.056	0.084	0.095	0.105	0.112	0.140	0.154	0.165	0.175	0.186	0.196	0.210		
	4	1 x D	●	Required	60	150	260	fn	0.042	0.056	0.070	0.084	0.098	0.112	0.140	0.147	0.154	0.165	0.175	0.196		
	5	1,5 x D	●	Required	60	200	400	fn	0.056	0.084	0.095	0.105	0.112	0.140	0.154	0.165	0.175	0.186	0.196	0.210		