

■ Series 5A02 5A03 • AluSurf

Material Group	Side Milling (A) and Slotting (B)			uncoated			Recommended feed per tooth (IPT = inch/th) for side milling (A). For slotting (B), reduce IPT by 20%.								
	A		B	Cutting Speed – vc SFM			D1 – Diameter								
	ap	ae	ap	min		max	frac.	1/4	5/16	3/8	1/2	5/8	3/4	1	
	ap	ae	ap	min		max	dec.	.2500	.3130	.3750	.5000	.6250	.7500	1.000	
N	1	1.5 x D	0.5 x D	1 x D	1640	–	6560	IPT	.0023	.0028	.0034	.0045	.0056	.0068	.0090
	2	1.5 x D	0.5 x D	1 x D	1640	–	4920	IPT	.0018	.0023	.0027	.0036	.0045	.0054	.0072
	3	1.5 x D	0.5 x D	1 x D	1640	–	4920	IPT	.0016	.0020	.0024	.0032	.0039	.0047	.0063
	4	1.5 x D	0.5 x D	1 x D	1310	–	2460	IPT	.0016	.0020	.0024	.0032	.0039	.0047	.0063
	5	1.5 x D	0.5 x D	1 x D	820	–	3280	IPT	.0020	.0025	.0030	.0041	.0051	.0061	.0081

NOTE: For cutting aluminum with high silicon, coating is recommended.
 For spindles with ceramic bearings, multiply ap by 0.5.
 For better surface finish, reduce feed per tooth.
 Above parameters are based on ideal conditions. For smaller taper machining centers, please adjust parameters accordingly on diameters >1/2".

Application Data • Series 5AN2 5AN3 • AluSurf™

■ Series 5AN2 5AN3 • AluSurf

Material Group	Side Milling (A) and Slotting (B)			uncoated			Recommended feed per tooth (IPT = inch/th) for side milling (A). For slotting (B), reduce IPT by 20%.										
	A		B	Cutting Speed – vc SFM			D1 – Diameter										
	ap	ae	ap	min		max	frac.	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1	
	ap	ae	ap	min		max	dec.	.1250	.1880	.2500	.3130	.3750	.5000	.6250	.7500	1.000	
N	1	1 x D	0.5 x D	1 x D	1640	–	6560	IPT	.0013	.0019	.0025	.0031	.0038	.0050	.0063	.0075	.0100
	2	1 x D	0.5 x D	1 x D	1640	–	4920	IPT	.0010	.0015	.0020	.0025	.0030	.0040	.0050	.0060	.0080
	3	1 x D	0.5 x D	1 x D	1640	–	4920	IPT	.0009	.0013	.0018	.0022	.0026	.0035	.0044	.0053	.0070
	4	1 x D	0.5 x D	1 x D	1310	–	2460	IPT	.0009	.0013	.0018	.0022	.0026	.0035	.0044	.0053	.0070
	4	1 x D	0.5 x D	1 x D	820	–	3280	IPT	.0011	.0017	.0023	.0028	.0034	.0045	.0056	.0068	.0090

NOTE: Side milling applications – For longest reach (L3) tools, reduce ae by 30%.
 Slot milling applications – For longest reach (L3) tools, reduce ap by 30%.
 For cutting aluminum with high silicon, coating is recommended.
 For spindles with ceramic bearings, multiply ap by 0.5.
 For better surface finish, reduce feed per tooth.
 Above parameters are based on ideal conditions. For smaller taper machining centers, please adjust parameters accordingly on diameters >1/2".

High-Performance Solid Carbide End Mills