

ALUFLASH™

*High-Performance Solid End Milling
for Aluminum*



Materials

N

Applications



Slotting



Side Milling/
Shoulder Milling



Ramping



Helical
Interpolation



Plunge Milling



Trochoidal Milling

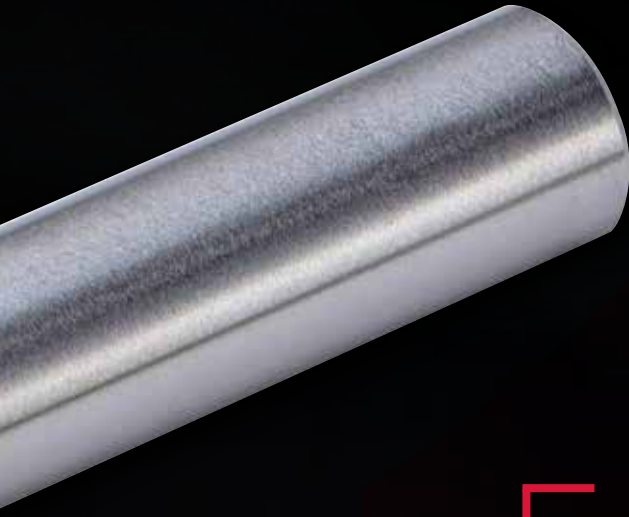


Drilling

UNCOATED

2- and 3-flute solid carbide end mill.
Diameter Range: 1mm–20mm (1/8-1")





Built-in features to enable accelerated aluminum machining.

Balanced by design to guarantee limited vibration and a low spindle load at very high RPMs.

“W” flute shape for improved chip formation and evacuation, increasing process security.

Parabolic core for increased tool stability and reduced deflection and risk of breakage.

Double/Triple rake gashing for improved chip evacuation and higher ramping capabilities and Z-axis machining.



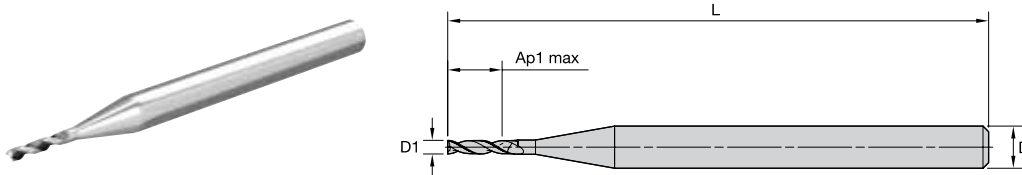
ALUFLASH • CATALOG NUMBERING SYSTEM

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.

3AN9M12006RJT

3A	N	9	M	120	0	6	R	J	T
Platform	Neck and Cutting Length	Shape/ Application	UOM	Cutting Diameter	Overall Length	Shank Size	Corner Style	Corner Size	Shank Style
2A = ALUFLASH 2 Flutes 3A = ALUFLASH 3 Flutes	0 = No Neck and Regular Cutting Length (approx 2 x D) 1 = No Neck - Long Cutting Length (approx 3 x D) 2 = No Neck - Longer Cutting Length (approx 5 x D) 3 = No Neck - Extended Cutting Length (approx 7 x D) N = Regular Neck approx 3 x D - Regular Cutting Length (approx 2 x D) L = Long Neck approx 4 x D - Regular Cutting Length (approx 2 x D) F = Extended Neck approx 5 x D - Regular Cutting Length (approx 2 x D) P = Neck - Longer Cutting Length (approx 3 x D) R = Neck - Extended Cutting Length (approx 5 x D)	9 = Specific for ISO N	M = Metric E = Inch	010 = 1.00mm 015 = 1.50mm 020 = 2.00mm 025 = 2.50mm 030 = 3.00mm (1/8") 035 = 3.50mm 040 = 4.00mm 045 = 4.50mm 050 = 5.00mm (3/16") 060 = 6.00mm 070 = 7.00mm (1/4") 080 = 8.00mm (5/16") 090 = 9.00mm 100 = 10.00mm (3/8") 110 = 7/16" 120 = 12mm 130 = 1/2" 160 = 16.00mm (5/8") 180 = 18.00mm 190 = 3/4" 200 = 20.00mm 250 = 25.00mm (1")	0 = Regular 1 = Extended 2 = Long 3 = Extra Long 4 = Stub	0 = 3.00mm (1/8") 1 = 4.00mm (3/16") 2 = 5.00mm 3 = 6.00mm (1/4") 4 = 8.00mm (5/16") 5 = 10.00mm (3/8") 6 = 12.00mm (1/2") 7 = 14.00mm 8 = 16.00mm (5/8") 9 = 20.00mm (3/4") A = 25.00mm (1")	S = Sharp R = Radius C = Chamfer G = Chamfer End Mill F = Concave Radius	Z = Sharp A = 0.20mm (.015") Y = 0.25mm (.017") E = 0.50mm (.030") G = 0.75mm (.060") J = 1.00mm (.090") H = 1.50mm (.010") K = 2.00mm (.120") M = 2.50mm (.160") P = 3.00mm (.190") Q = 4.00mm (.250") R = 5.00mm (.375") D = 6.00mm (.450") X = Special	T = Cylindrical

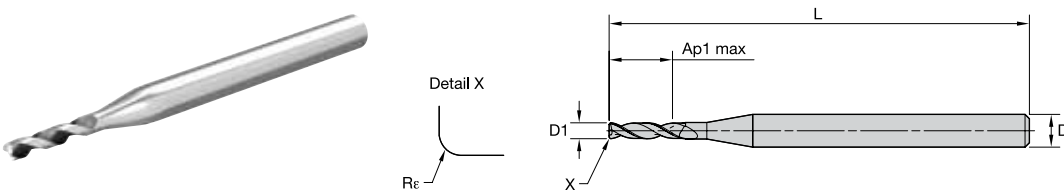
**ALUFLASH SERIES 2A09 • SQUARE END • 2 FLUTE •
REGULAR LENGTH • CYLINDRICAL SHANK • METRIC**



grade UNCOATED

order #	catalogue #	D1	D	length of cut Ap1 max	length L	Z U
6853514	2A09M01000SZT	1,0	3	4,00	38	2
6853515	2A09M01500SZT	1,5	3	6,00	38	2
6853517	2A09M02000SZT	2,0	3	8,00	38	2
6853519	2A09M02500SZT	2,5	3	9,00	38	2
6853542	2A09M04001SZT	4,0	4	12,00	50	2
6853544	2A09M05002SZT	5,0	5	14,00	50	2
6853547	2A09M06003SZT	6,0	6	16,00	50	2
6853549	2A09M08004SZT	8,0	8	20,00	63	2
6853552	2A09M12006SZT	12,0	12	25,00	76	2
6853554	2A09M16008SZT	16,0	16	32,00	89	2
6853556	2A09M20009SZT	20,0	20	40,00	104	2

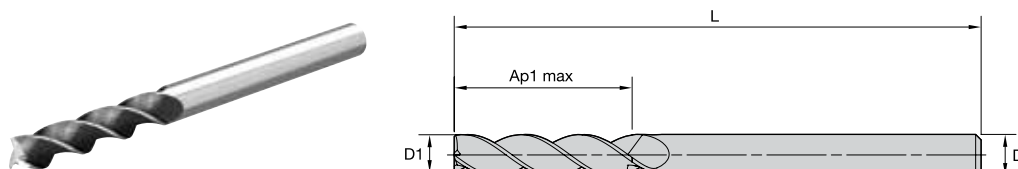
**ALUFLASH SERIES 2A09 • RADIUS • 2 FLUTE •
REGULAR LENGTH • CYLINDRICAL SHANK • METRIC**



grade UNCOATED

order #	catalogue #	D1	D	length of cut Ap1 max	length L	Re	Z U
6853516	2A09M01500RAT	1,5	3	6,00	38	0,20	2
6853518	2A09M02000RAT	2,0	3	8,00	38	0,20	2
6853520	2A09M02500RAT	2,5	3	9,00	38	0,20	2
6853541	2A09M03000RAT	3,0	3	12,00	38	0,20	2
6853543	2A09M04001RAT	4,0	4	12,00	50	0,20	2
6853546	2A09M05002RAT	5,0	5	14,00	50	0,20	2
6853548	2A09M06003RET	6,0	6	16,00	50	0,50	2
6853550	2A09M08004RET	8,0	8	20,00	63	0,50	2
6853551	2A09M10005RJT	10,0	10	22,00	76	1,00	2
6853553	2A09M12006RJT	12,0	12	25,00	76	1,00	2
6853555	2A09M16008RJT	16,0	16	32,00	89	1,00	2
6853557	2A09M20009RJT	20,0	20	40,00	104	1,00	2

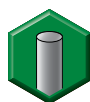
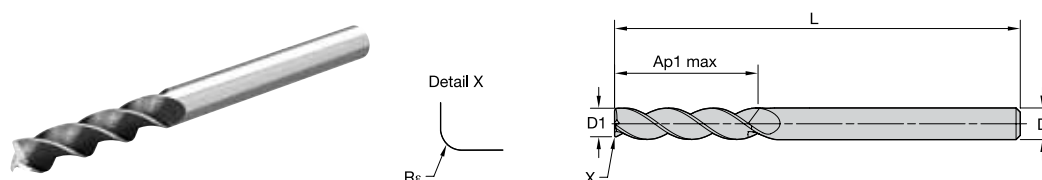
ALUFLASH SERIES 3A09 • SQUARE END • 3 FLUTE • REGULAR LENGTH • CYLINDRICAL SHANK • METRIC



grade UNCOATED

order #	catalogue #	D1	D	length of cut Ap1 max	length L	Z U
6853511	3A09M03000SZT	3,0	3	12,00	38	3

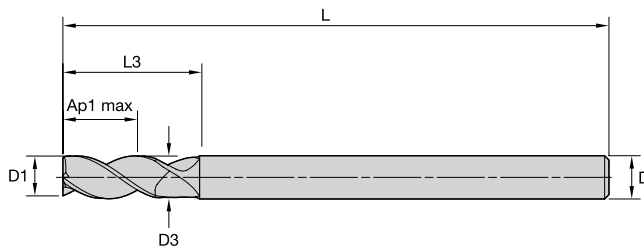
ALUFLASH SERIES 3A09 • RADIUS • 3 FLUTE • REGULAR LENGTH • CYLINDRICAL SHANK • METRIC



grade UNCOATED

order #	catalogue #	D1	D	length of cut Ap1 max	length L	Re	Z U
6853512	3A09M03000RAT	3,0	3	12,00	38	0,20	3
6853513	3A09M04001RET	4,0	4	12,00	63	0,50	3

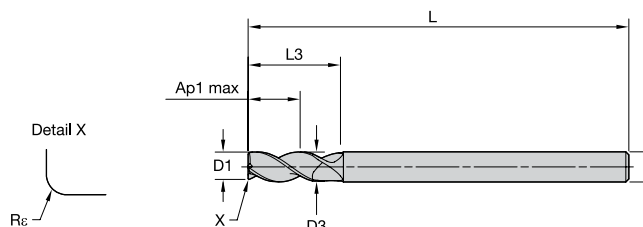
**ALUFLASH SERIES 3AN9 • SQUARE END • 3 FLUTE •
REGULAR LENGTH • REGULAR NECK • CYLINDRICAL SHANK • METRIC**



grade UNCOATED

order #	catalogue #	D1	D	D3	length of cut Ap1 max	length L	L3	Z U
6853460	3AN9M04001SZT	4,0	4	3,76	8,00	50	12,00	3
6853462	3AN9M05002SZT	5,0	5	4,70	10,00	63	15,00	3
6853465	3AN9M06003SZT	6,0	6	5,64	13,00	63	18,00	3
6853469	3AN9M08004SZT	8,0	8	7,52	18,00	76	24,00	3
6853474	3AN9M10005SZT	10,0	10	9,40	22,00	76	30,00	3
6853479	3AN9M12006SZT	12,0	12	11,28	25,00	76	36,00	3
6853486	3AN9M16008SZT	16,0	16	15,04	32,00	89	48,00	3
6853494	3AN9M20009SZT	20,0	20	18,80	40,00	115	60,00	3

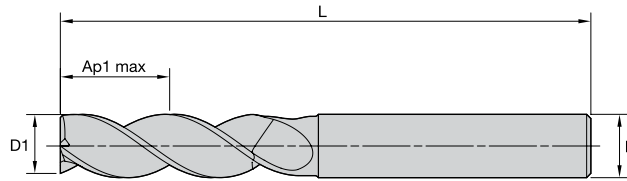
ALUFLASH SERIES 3AN9 • RADIUS • 3 FLUTE • REGULAR LENGTH • REGULAR NECK • CYLINDRICAL SHANK • METRIC



grade UNCOATED

order #	catalogue #	D1	D	D3	length of cut Ap1 max	length L	L3	Rr	Z U
6853461	3AN9M04001RAT	4,0	4	3,76	8,00	50	12,00	0,20	3
6853463	3AN9M05002RAT	5,0	5	4,70	10,00	63	15,00	0,20	3
6853464	3AN9M05002RET	5,0	5	4,70	10,00	63	15,00	0,50	3
6853466	3AN9M06003RAT	6,0	6	5,64	13,00	63	18,00	0,20	3
6853467	3AN9M06003RET	6,0	6	5,64	13,00	63	18,00	0,50	3
6853468	3AN9M06003RJT	6,0	6	5,64	13,00	63	18,00	1,00	3
6853470	3AN9M08004RAT	8,0	8	7,52	18,00	76	24,00	0,20	3
6853471	3AN9M08004RET	8,0	8	7,52	18,00	76	24,00	0,50	3
6853473	3AN9M08004RHT	8,0	8	7,52	18,00	76	24,00	1,50	3
6853472	3AN9M08004RJT	8,0	8	7,52	18,00	76	24,00	1,00	3
6853475	3AN9M10005RAT	10,0	10	9,40	22,00	76	30,00	0,20	3
6853476	3AN9M10005RET	10,0	10	9,40	22,00	76	30,00	0,50	3
6853478	3AN9M10005RHT	10,0	10	9,40	22,00	76	30,00	1,50	3
6853477	3AN9M10005RJT	10,0	10	9,40	22,00	76	30,00	1,00	3
6853480	3AN9M12006RAT	12,0	12	11,28	25,00	76	36,00	0,20	3
6853481	3AN9M12006RET	12,0	12	11,28	25,00	76	36,00	0,50	3
6853483	3AN9M12006RHT	12,0	12	11,28	25,00	76	36,00	1,50	3
6853482	3AN9M12006RJT	12,0	12	11,28	25,00	76	36,00	1,00	3
6853484	3AN9M12006RKT	12,0	12	11,28	25,00	76	36,00	2,00	3
6853485	3AN9M12006RPT	12,0	12	11,28	25,00	76	36,00	3,00	3
6853487	3AN9M16008RAT	16,0	16	15,04	32,00	89	48,00	0,20	3
6853488	3AN9M16008RET	16,0	16	15,04	32,00	89	48,00	0,50	3
6853490	3AN9M16008RHT	16,0	16	15,04	32,00	89	48,00	1,50	3
6853489	3AN9M16008RJT	16,0	16	15,04	32,00	89	48,00	1,00	3
6853491	3AN9M16008RMT	16,0	16	15,04	32,00	89	48,00	2,50	3
6853492	3AN9M16008RPT	16,0	16	15,04	32,00	89	48,00	3,00	3
6853493	3AN9M16008RQT	16,0	16	15,04	32,00	89	48,00	4,00	3
6853495	3AN9M20009RAT	20,0	20	18,80	40,00	115	60,00	0,20	3
6853496	3AN9M20009RHT	20,0	20	18,80	40,00	115	60,00	1,50	3
6853497	3AN9M20009RKT	20,0	20	18,80	40,00	115	60,00	2,00	3
6853498	3AN9M20009RPT	20,0	20	18,80	40,00	115	60,00	3,00	3
6853499	3AN9M20009RQT	20,0	20	18,80	40,00	115	60,00	4,00	3
6853500	3AN9M20009RRT	20,0	20	18,80	40,00	115	60,00	5,00	3

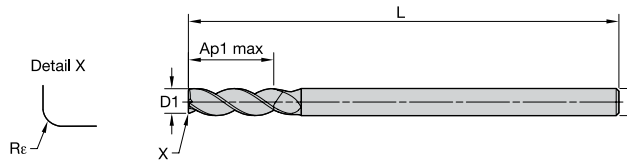
**ALUFLASH SERIES 3AP9 • SQUARE END • 3 FLUTE •
LONG LENGTH • REGULAR NECK • CYLINDRICAL SHANK • METRIC**



grade UNCOATED

order #	catalogue #	D1	D	D3	length of cut Ap1 max	length L	L3	Z U
6853448	3AP9M12016SZT	12,0	12	11,28	36,00	100	48,00	3

**ALUFLASH SERIES 3AP9 • RADIUS • 3 FLUTE •
LONG LENGTH • REGULAR NECK • CYLINDRICAL SHANK • METRIC**



grade UNCOATED

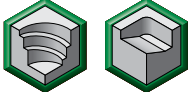
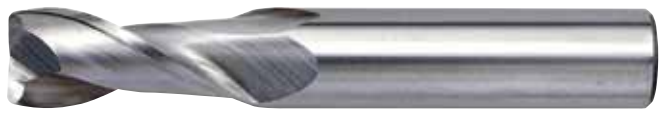
order #	catalogue #	D1	D	D3	length of cut Ap1 max	length L	L3	Rε	Z U
6853439	3AP9M04011RAT	4,0	4	3,76	12,00	63	16,00	0,20	3
6853440	3AP9M05002RAT	5,0	5	4,70	15,00	63	20,00	0,20	3
6853441	3AP9M06013RET	6,0	6	5,64	18,00	76	24,00	0,50	3
6853442	3AP9M06013RJT	6,0	6	5,64	18,00	76	24,00	1,00	3
6853443	3AP9M08014RET	8,0	8	7,52	24,00	76	32,00	0,50	3
6853444	3AP9M08014RJT	8,0	8	7,52	24,00	76	32,00	1,00	3
6853445	3AP9M10015RET	10,0	10	9,40	30,00	89	40,00	0,50	3
6853446	3AP9M10015RHT	10,0	10	9,40	30,00	89	40,00	1,50	3
6853447	3AP9M10015RKT	10,0	10	9,40	30,00	89	40,00	2,00	3
6853449	3AP9M12016RET	12,0	12	11,28	36,00	100	48,00	0,50	3
6853450	3AP9M12016RHT	12,0	12	11,28	36,00	100	48,00	1,50	3
6853451	3AP9M12016RPT	12,0	12	11,28	36,00	100	48,00	3,00	3
6853452	3AP9M16018RET	16,0	16	15,04	48,00	110	64,00	0,50	3
6853453	3AP9M16018RHT	16,0	16	15,04	48,00	110	64,00	1,50	3
6853454	3AP9M16018RPT	16,0	16	15,04	48,00	110	64,00	3,00	3
6853455	3AP9M20019RET	20,0	20	18,80	60,00	150	80,00	0,50	3
6853456	3AP9M20019RHT	20,0	20	18,80	60,00	150	80,00	1,50	3
6853457	3AP9M20019RKT	20,0	20	18,80	60,00	150	80,00	2,00	3
6853458	3AP9M20019RPT	20,0	20	18,80	60,00	150	80,00	3,00	3
6853459	3AP9M20019RQT	20,0	20	18,80	60,00	150	80,00	4,00	3



ALUFLASH • SIDE MILLING AND SLOTTING • APPLICATION DATA • METRIC



		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													
Material Group		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	

		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													
Material Group		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 • 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

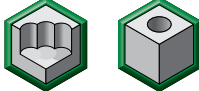
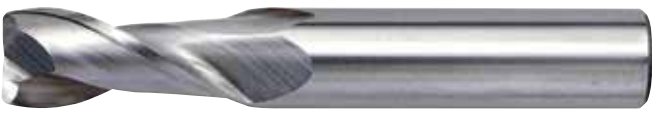
ALUFLASH • RAMPING 3FL • APPLICATION DATA • METRIC


		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]													
Material Group	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

		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]													
Material Group	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

		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]													
Material Group	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 • PLUNGING • APPLICATION DATA • METRIC

																				
																				UNCOATED
Plunging/Drilling				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

																				
																				UNCOATED
Plunging/Drilling				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