

LNMX 06/10 High Feed Milling

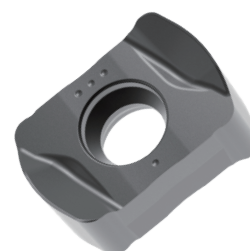


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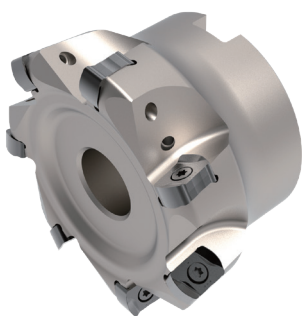
Achteck high-feed milling cutters have been upgraded. Models with 20° and 25° approach angles are compatible with LN06 and LN10 inserts correspondingly. Equipped with exclusive structural design and self-developed insert grades, this tool series achieves outstanding machining performance and premium workpiece surface finish.

Insert characteristics

- MM3 sharp insert geometry with optimized cutting edge treatment enables smooth and effortless machining.
- MM4(N) versatile insert geometry features a robust cutting edge design for higher machining efficiency.
- Negative inserts feature 4 usable double-sided cutting edges to achieve favorable cost efficiency.
- Fully pressed insert with balanced cost and performance.
- Multiple insert grades cover ISO P/M/K/S/H workpiece ranges.



Cutter characteristics

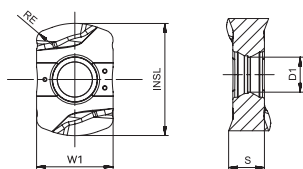


- Diameters range from $\Phi 16$ mm to $\Phi 125$ mm.
Coupling type: Threaded, Cylindrical shank, Arbor
- Smooth chip evacuation with reduced tool vibration risk.
- Nickel-plated surface with pleasing appearance and dependable corrosion resistance.
- Equipped with internal coolant for targeted cooling and improved cutting performance.

Geometry characteristics

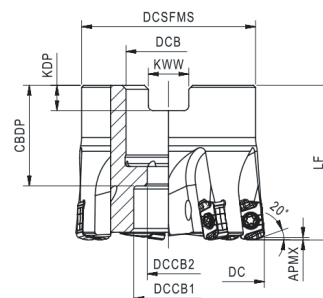
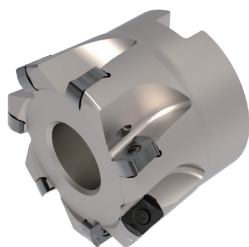
Geometry	Edge	Application
MM3		• Low cutting force, for weak machining condition • Sharp geometry • For steel, stainless-steel and heat resistant alloy machining.
MM4(N)		• For medium machining condition • Universal geometry • For machining most materials

● AHM20-LN06 Product List



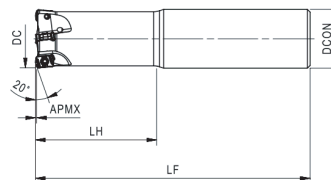
		Machining conditions					● Good Conditions ● General Conditions ✖ Bad Conditions										
							Dimension (mm)					P		M		K	
Insert shape	Product code	INSL	W1	S	RE	D1	AP251U	AP351U	AC251P	AP351M	AP403M	AP251K	AC301K	AC151K	AP403S	AP351S	AP153H
	LNMX 060410ER-MM3	10	6.35	3.6	1.0	3.0	●	●			●				●	●	●
	LNMX 060410ER-MM4N	10	6.35	3.6	1.0	3.0	●	●	○		●	○	●		●	●	●

●: Stock available ○: Made to Order

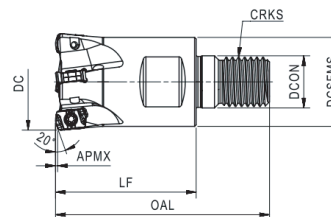


Product code	Dimension (mm)										Coolant	Weight(kg)	Z	Insert
	DC	DCSFMS	DCB	DCCB1	DCCB2	LF	CBDB	KDP	KWW	APMX				
AHM20-040-Z06-A16R-LN06-C	40	35	16	14	9	40	24	5.8	8.4	0.65		0.3	6	LN..0604..
AHM20-050-Z07-A22R-LN06-C	50	45	22	18	11	40	26	6.5	10.4	0.65		0.4	7	
AHM20-052-Z07-A22R-LN06-C	52	45	22	18	11	40	26	6.5	10.4	0.65		0.4	7	
AHM20-063-Z08-A22R-LN06-C	63	48	22	18	11	40	26	6.5	10.4	0.65		0.6	8	

Note:  With internal coolant
 without internal coolant



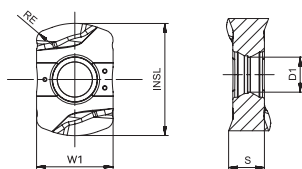
Product code	Dimension (mm)					Coolant	Weight(kg)	Z	Insert
	DC	DCON	LF	LH	APMX				
AHM20-016-Z02-C16R-LN06-L100-C	16	16	100	25	0.65		0.2	2	LN..0604..
AHM20-017-Z02-C16R-LN06-L150-C	17	16	150	21	0.65		0.2	2	
AHM20-020-Z03-C20R-LN06-L130-C	20	20	130	30	0.65		0.3	3	
AHM20-021-Z03-C20R-LN06-L160-C	21	20	160	26	0.65		0.4	3	
AHM20-025-Z03-C25R-LN06-L140-C	25	25	140	56	0.65		0.5	3	
AHM20-026-Z03-C25R-LN06-L180-C	26	25	180	30	0.65		0.6	3	
AHM20-032-Z04-C32R-LN06-L150-C	32	32	150	66	0.65		0.8	4	
AHM20-033-Z04-C32R-LN06-L200-C	33	32	200	31.5	0.65		1.1	4	
AHM20-035-Z05-C32R-LN06-L200-C	35	32	200	32	0.65		1.2	5	



Product code	Dimension (mm)							Coolant	Weight(kg)	Z	Insert
	DC	DCON	DCSFMS	OAL	LF	CRKS	APMX				
AHM20-016-Z02-M08R-LN06-C	16	8.5	15	42	25	M8	0.65		0.1	2	LN..0604..
AHM20-017-Z02-M08R-LN06-C	17	8.5	14.5	42	25	M8	0.65		0.1	2	
AHM20-020-Z03-M10R-LN06-C	20	10.5	18	49.5	30	M10	0.65		0.1	3	
AHM20-021-Z03-M10R-LN06-C	21	10.5	18	51	31.5	M10	0.65		0.1	3	
AHM20-025-Z04-M12R-LN06-C	25	12.5	23	59	35	M12	0.65		0.1	4	
AHM20-026-Z03-M12R-LN06-C	26	12.5	23	59	35	M12	0.65		0.1	3	
AHM20-026-Z04-M12R-LN06-C	26	12.5	23	59	35	M12	0.65		0.1	4	
AHM20-032-Z04-M16R-LN06-C	32	17	29	70	46	M16	0.65		0.3	4	
AHM20-032-Z05-M16R-LN06-C	32	17	29	70	46	M16	0.65		0.3	5	
AHM20-033-Z05-M16R-LN06-C	33	17	29	70	46	M16	0.65		0.3	5	
AHM20-035-Z05-M16R-LN06-C	35	17	29	70	46	M16	0.65		0.3	5	
AHM20-040-Z06-M16R-LN06-C	40	17	29	70	46	M16	0.65		0.3	6	

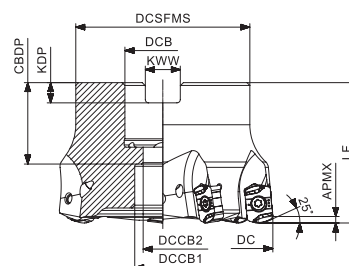
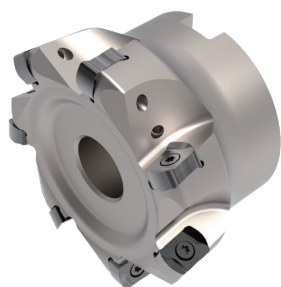
Note: With internal coolant
 without internal coolant

● AHM25-LN10 Product List



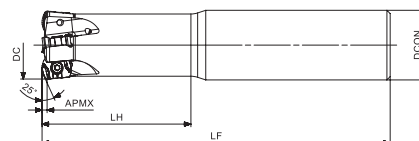
		Machining conditions					● Good Conditions ● General Conditions ✖ Bad Conditions										
							●	●	●	●	✖	●	●	●	✖	✖	●
		Dimension (mm)					P		M		K		S		H		
Insert shape	Product code	INSL	W1	S	RE	D1	AP251U	AP351U	AC251P	AP351M	AP403M	AP251K	AC301K	AC151K	AP403S	AP351S	AP153H
	LNMX 100512ER-MM3	13.5	9.2	4.55	1.2	4.21	●	●		●	●				●		●
	LNMX 100512ER-MM4	13.5	9.2	4.55	1.2	4.21	●	●		●					●		●

●: Stock available ○: Made to Order

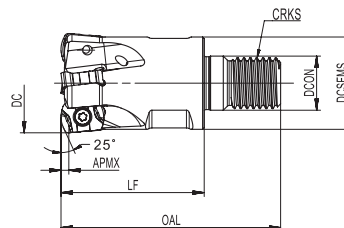


Product code	Dimension (mm)										Coolant	Weight(kg)	Z	Insert
	DC	DCSFMS	DCB	DCCB1	DCCB2	LF	CBDP	KDP	KWW	APMX				
AHM25-040-Z04-A16R-LN10-C	40	38	16	14	9	40	24	5.8	8.4	1.2		0.3	4	LN..1005..
AHM25-040-Z05-A16R-LN10-C	40	38	16	14	9	40	24	5.8	8.4	1.2		0.3	5	
AHM25-050-Z05-A22R-LN10-C	50	45	22	18	11	40	26	6.5	10.4	1.2		0.4	5	
AHM25-050-Z07-A22R-LN10-C	50	45	22	18	11	40	26	6.5	10.4	1.2		0.4	7	
AHM25-063-Z06-A22R-LN10-C	63	52	22	18	11	40	26	6.5	10.4	1.2		0.6	6	
AHM25-063-Z08-A22R-LN10-C	63	52	22	18	11	40	26	6.5	10.4	1.2		0.6	8	
AHM25-080-Z07-A27R-LN10-C	80	62	27	20	14	50	29	7.2	12.4	1.2		1.1	7	
AHM25-080-Z09-A27R-LN10-C	80	62	27	20	14	50	29	7.2	12.4	1.2		1.1	9	
AHM25-100-Z08-A32R-LN10-C	100	78	32	26	18	50	32	8.2	14.4	1.2		1.7	8	
AHM25-100-Z10-A32R-LN10-C	100	78	32	26	18	50	32	8.2	14.4	1.2		1.8	10	
AHM25-125-Z12-A40R-LN10-C	125	90	40	33	22	63	38	9.2	16.4	1.2		3.3	12	

Note:  With internal coolant
 without internal coolant



Product code	Dimension (mm)					Coolant	Weight(kg)	Z	Insert
	DC	DCON	LF	LH	APMX				
AHM25-025-Z02-C25R-LN10-L150-C	25	25	150	68	1.20		0.5	2	LN..1005..
AHM25-025-Z03-C25R-LN10-L150-C	25	25	150	68	1.20		0.5	3	
AHM25-026-Z03-C25R-LN10-L150-C	26	25	150	28	1.20		0.5	3	
AHM25-026-Z03-C25R-LN10-L220-C	26	25	220	28	1.20		0.8	3	
AHM25-032-Z03-C32R-LN10-L160-C	32	32	160	68	1.20		0.9	3	
AHM25-032-Z04-C32R-LN10-L160-C	32	32	160	68	1.20		0.9	4	
AHM25-033-Z04-C32R-LN10-L180-C	33	32	180	28	1.20		1.0	4	
AHM25-033-Z04-C32R-LN10-L250-C	33	32	250	28	1.20		1.4	4	

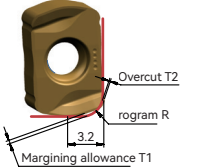
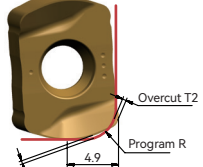


Product code	Dimension (mm)							Coolant	Weight(kg)	Z	Insert
	DC	DCON	DCSFMS	OAL	LF	CRKS	APMX				
AHM25-025-Z02-M12R-LN10-C	25	12.5	23	61	39	M12	1.20		0.2	2	LN..1005..
AHM25-025-Z03-M12R-LN10-C	25	12.5	23	61	39	M12	1.20		0.2	3	
AHM25-026-Z03-M12R-LN10-C	26	12.5	23	61	39	M12	1.20		0.2	3	
AHM25-032-Z03-M16R-LN10-C	32	17	29	69	45	M16	1.20		0.3	3	
AHM25-032-Z04-M16R-LN10-C	32	17	29	69	45	M16	1.20		0.3	4	
AHM25-033-Z04-M16R-LN10-C	33	17	29	69	45	M16	1.20		0.3	4	

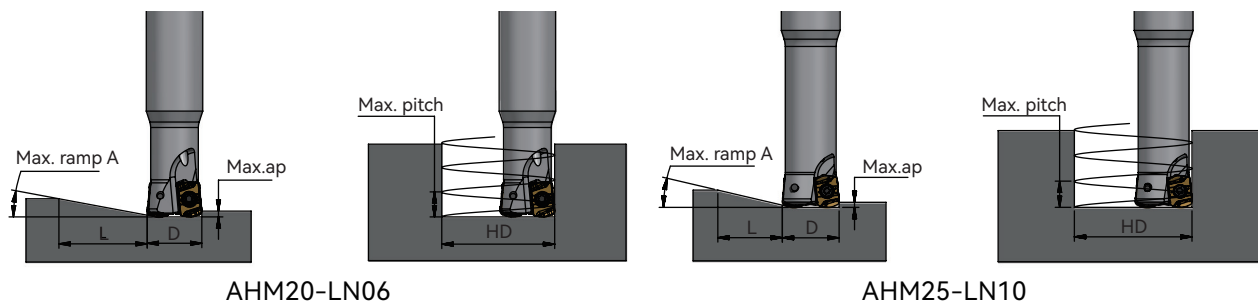
Note: With internal coolant
 without internal coolant

Cutter	Diameter (mm)	Screw	Wrench	Torque
AHM25-LN06	Ø 16-63	SP02506450H	DT-TP08	1.0 Nm
AHM25-LN10	Ø 25-125	SP035087H	DT-TP10	3.0 Nm

Technical Information for NC Program

Figure	Radius (mm)	Machining allowance T1 (mm)	Over-cut T2 (mm)
	1.5	0.43	0
	2.0	0.29	0.06
	2.5	0.15	0.24
	Setting the programming radius to 1.5 mm prevents workpiece over-cutting.		
	2.3	0.57	0
	2.5	0.53	0.03
	3.0	0.37	0.15
	Setting the programming radius to 2.3 mm prevents workpiece over-cutting.		

Application Information



Cutter	Diameter D (mm)	Linear Ramping			Helical interpolation		
		Max. A	Max. ap (mm)	Min. L (mm)	Min. HD (mm)	Max. HD (mm)	Max. pitch (mm)
AHM20-LN06	Ø16	2.9°	0.65	13.8	23	32	0.65
	Ø17	2.6°	0.65	15.4	25	34	0.65
	Ø20	1.9°	0.65	21.1	31	40	0.65
	Ø21	1.8°	0.65	22.3	33	42	0.65
	Ø25	1.3°	0.65	30.8	41	50	0.65
	Ø26	1.3°	0.65	30.8	43	52	0.65
	Ø32	0.9°	0.65	44.6	55	64	0.65
	Ø33	0.9°	0.65	44.6	57	66	0.65
	Ø40	0.7°	0.65	57.3	71	80	0.65
	Ø50	0.5°	0.65	80.2	91	100	0.65
AHM25-LN10	Ø63	0.4°	0.65	100.3	117	126	0.65
	Ø25	3.2°	1.20	21.8	34	50	0.8
	Ø26	2.9°	1.20	23.6	36	52	0.8
	Ø32	2.0°	1.20	34.7	48	64	0.9
	Ø33	1.9°	1.20	36.5	50	66	0.9
	Ø35	1.7°	1.20	40.2	54	70	0.9
	Ø40	1.4°	1.20	49.5	64	80	1.0
	Ø50	1.0°	1.20	67.9	84	100	1.0
	Ø63	0.7°	1.20	91.9	110	126	1.0
	Ø80	0.6°	1.20	123.3	144	160	1.1
	Ø100	0.4°	1.20	160.2	184	200	1.1
	Ø125	0.3°	1.20	206.4	234	250	1.1

Case Story 1

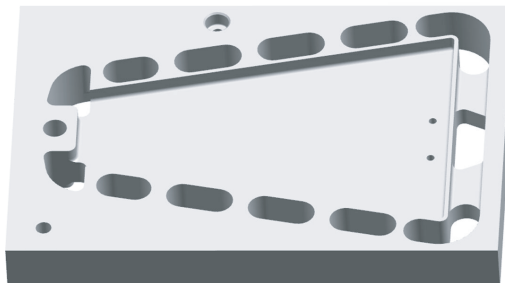
Component: Aerospace Frame

Material: TC4

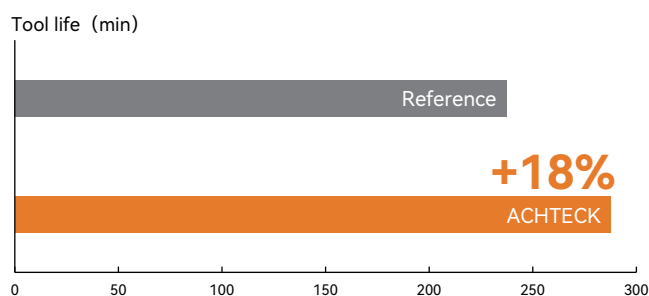
Cutter: AHM20-020-Z03-C20R-LN06-C

Insert: LNMX 060410ER-MM4N

Grade: AP351S



Cutting Data	Reference	ACHTECK
V_d [m/min]	62.8	62.8
f_z [mm/t]	0.45	0.45
a_p [mm]	0.5	0.5
Coolant	Emulsion	Emulsion
Tool life [min]	240	285



Case Story 2

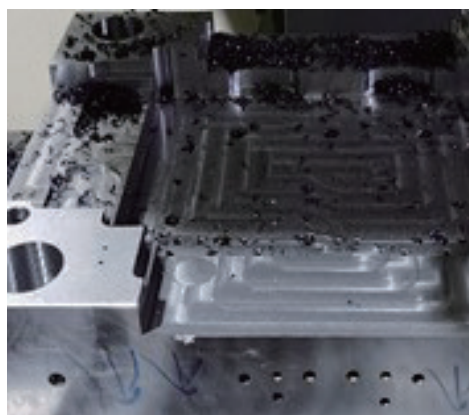
Component: Mold

Material: 1Cr13

Cutter: AHM25-050-Z05-A22R-LN10-C

Insert: LNMX 100512ER-MM4

Grade: AP351U



Cutting Data	Reference	ACHTECK
V_c [m/min]	157	157
f_z [mm/t]	0.6	0.6
a_p [mm]	0.8	0.8
Coolant	Emulsion	Emulsion
Tool life [min]	240	360

