

MAGIA

APKT 060204

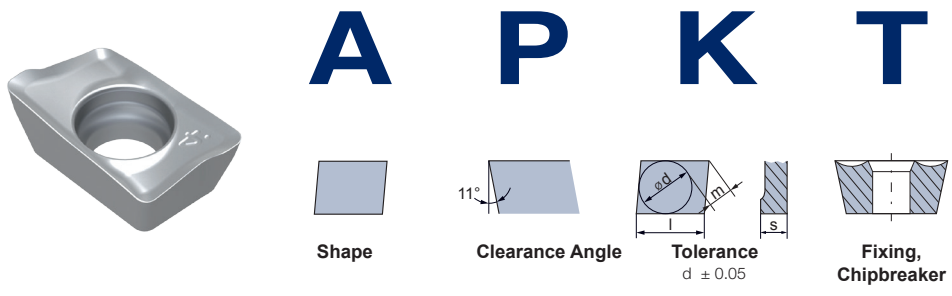
LT 3000



LAMINA
TECHNOLOGIES

INTRODUCING

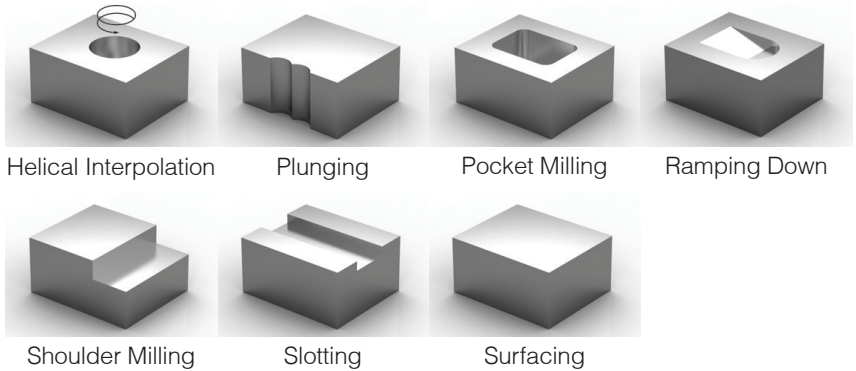
AVAILABLE IN MAGIA LT 3000



P **M** **K** **S** **H** **N**

Insert Designation	L	S	R	Direction	Catalog Nr
APKT 060204 PDTR LT 3000	6.00	2.16	0.40	Right	M0004026

APPLICATION GUIDE



MACHINING RECOMMENDATIONS

↑ **F** ⇒
↑ **Productivity**

Coolant

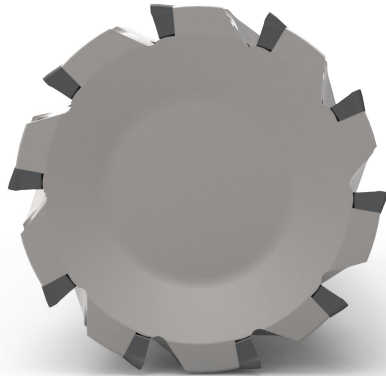
1, 2, 3, 4	No
6, 7, 8, 11	No
10, 12	Yes
5, 9	Yes

Stainless Steel

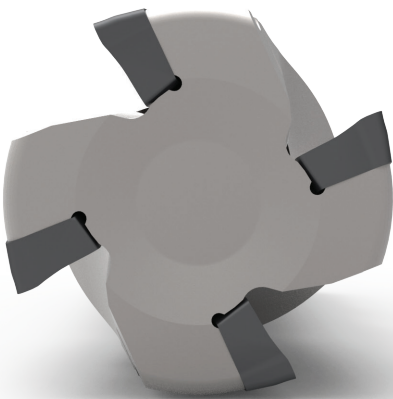
↑ **V_C**



ADVANTAGES



∅40 END MILLS CUTTER, APKT 06 / 10 TEETH



∅40 END MILLS CUTTER, APKT 16 / 4 TEETH

COMPARED WITH LARGER INSERTS

Greater Productivity

- Due to the small size of the inserts, it is possible to have more teeth than other indexable cutters of the same diameter, increasing the effective feed rate.

Soft and Stable Cut

- Although the effective feed rate can be higher, the feed per tooth is lower than the feed per tooth with bigger inserts, making the cut smoother with less cutting forces. Excellent advantage for machines with relatively low power.
- Good stability by having minimum of 2 teeth, even in the smallest cutter diameter (10mm).

COMPARED WITH SOLID END MILLS

Increased Productivity

- Replaces solid end mills in roughing to semi-finishing with much higher metal removal rate.

Cost Savings, More Reliability

- Replaces solid carbide end mills in roughing to semi-finishing operations, with substantial cost savings.
- No need to regrind when worn. Simply exchange the insert cutting edge.
- Less carbide is used per insert, which means more economy and less environmental impact.
- Cutter body made of steel improves resistance to shocks/instability while machining.

END MILLS - APKT 060204



End Mills – APKT 060204 PDTR

DESIGNATION	D	d	L1	L	Ap	Z	α	Catalog Nr.
LT 751 C-W-D010/2	10	10	16	72	5.2	2	7.0	M2003066
LT 751 C-W-D012/3	12	12	26	80	5.2	3	5.0	M2003069
LT 751 CL-W-D016/3	16	16	50	120	5.2	3	2.4	M2003070
LT 751 C-W-D016/4	16	16	32	90	5.2	4	2.4	M2003071
LT 751 C-W-D020/5	20	20	40	100	5.2	5	1.6	M2003072
LT 751 C-W-D025/7*	25	20	40	120	5.2	7	1.2	M2003073
LT 751 C-W-D032/8*	32	25	40	130	5.2	8	0.8	M2003074
LT 751 C-W-D040/10*	40	32	40	140	5.2	10	0.6	M2003075

* Available on request

Replacement screw:
Replacement bit (Torx Plus 6IP):

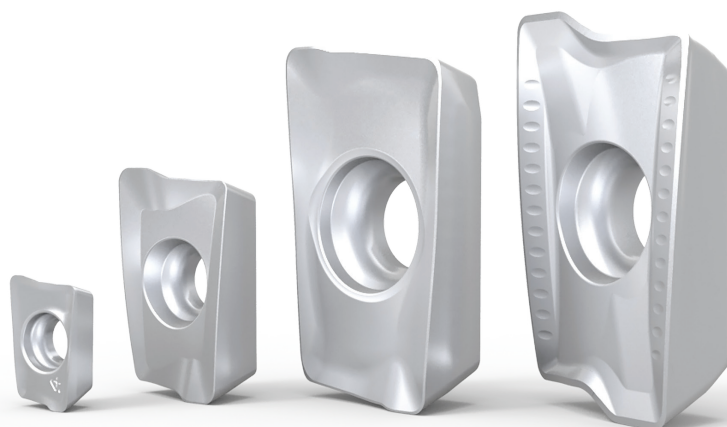
M2001640
M2003064

Due to the small size of these inserts, using a pre-set torque screw driver (0.4Nm) at all times is recommended.



MAGIA LT 3000

NEW GENERATION MILLING GRADE



ALSO AVAILABLE IN LT 3000

APKT 060204 PDTR
APKT 1003 PDTR
APKT 1604 PDTR
APKT 1705 PETR

Lamina Technologies premium milling grade provides higher performance, greater productivity, excellent thermal shock resistance and even longer tool life.

- Denser micro structured PVD coating
- Smoother coating
- Lower wear rate
- Progressive & predictable wear
- More flexibility
- Extended applicable range

Full line of APKT inserts and cutters available.
Contact us or visit our website for more information.

MAGIA

MACHINING CONDITIONS

APKT 060204 PDTR | LT3000

Material Group	Gr. N°	VDI Group	Material Exemples	Hardness	D.O.C [mm]		Feed [mm/tooth]		V _c [m/min]		Suggested Starting Parameters			
					min	max	min	max	min	max	D.O.C	Feed	V _c	
Steel	Non Alloyed	1	C35, Ck45, 1020, 1045, 1060, 28Mn6	125 HB	0.3	5.5	0.04	0.13	190	330	1.3	0.07	250	
		2		190 HB	0.3	5.5	0.04	0.13	190	300	1.3	0.07	220	
		3		250 HB	0.3	5.5	0.04	0.13	190	250	1.3	0.07	200	
	Low Alloyed	2	6	42CrMo4, S150, Ck60, 4140, 4340, 100Cr6	180 HB	0.3	5.5	0.03	0.10	150	240	1.3	0.06	200
			4,6		230 HB	0.3	5.5	0.03	0.10	150	210	1.3	0.06	180
			5,7		280 HB	0.3	5.5	0.03	0.09	130	190	1.3	0.05	150
			8		350 HB	0.3	5.5	0.03	0.09	130	170	1.3	0.05	140
	High Alloyed	3	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.3	3.9	0.03	0.09	90	150	1.0	0.05	130	
				280 HB	0.3	3.9	0.03	0.09	90	130	1.0	0.05	120	
				320 HB	0.3	3.9	0.03	0.07	60	110	1.0	0.05	100	
				350 HB	0.3	3.9	0.03	0.07	60	90	1.0	0.05	80	
Stainless Steel	Austenitic	4	304, 316, X5CrNi18-9	180 HB	0.3	5.5	0.03	0.10	190	250	1.3	0.06	220	
				240 HB	0.3	5.5	0.03	0.09	160	210	1.3	0.06	190	
	Duplex	5	X2CrNiN23-4, S31500	290 HB	0.3	3.9	0.03	0.07	70	130	1.0	0.05	100	
				310 HB	0.3	3.9	0.03	0.07	70	120	1.0	0.05	90	
	Ferritic & Martensitic	6	410, X6Cr17, 17-4 PH, 430	200 HB	0.3	5.5	0.03	0.10	150	210	1.3	0.06	190	
				42 HRc	0.3	3.9	0.03	0.08	90	150	1.0	0.05	130	
Cast Iron	Grey	7	GG20, GG40, EN-GJL-250, No30B	150 HB	0.3	5.5	0.04	0.13	150	240	1.3	0.07	200	
				200 HB	0.3	5.5	0.04	0.13	150	220	1.3	0.07	180	
				250 HB	0.3	5.5	0.04	0.13	150	190	1.3	0.07	160	
	Malleable & Nodular	8	GGG40, GGG70, 50005	150 HB	0.3	5.5	0.03	0.11	100	200	1.3	0.06	180	
				200 HB	0.3	5.5	0.03	0.11	100	180	1.3	0.06	150	
				250 HB	0.3	5.5	0.03	0.11	100	150	1.3	0.06	130	
High Temp. Alloys	Fe, Ni & Co Based	9	31,32	Incoloy 800	240 HB	0.3	3.9	0.03	0.07	25	45	1.0	0.05	32
			33	Inconel 700	250 HB	0.3	3.9	0.03	0.07	25	45	1.0	0.05	30
			34	Stellite 21	350 HB	0.3	3.9	0.03	0.07	25	45	1.0	0.05	30
	Ti Based	10	36	TiAl6V4	-	0.3	3.9	0.03	0.08	40	65	1.0	0.05	55
			37	T40	-	0.3	3.9	0.03	0.07	30	55	1.0	0.05	40
			Hardened Mat.	11	X100CrMo13, 440C, G-X260NiCr42	38	45 HRc	0.3	2.0	0.02	0.07	40	80	0.7
38	50 HRc	0.3				1.2	0.02	0.06	40	70	0.5	0.04	55	
38	55 HRc	0.3				0.6	0.02	0.06	40	60	0.3	0.04	50	
40	Ni-Hard 2	400 HB			0.3	1.6	0.02	0.07	40	80	0.5	0.04	50	
41	G-X300CrMo15	55 HRc			0.3	0.6	0.02	0.06	30	60	0.3	0.04	40	
NF	Al (>8%Si)	12	25	AlSi12	130 HB	0.3	5.5	0.04	0.13	200	400	1.3	0.08	280



LAMINA TECHNOLOGIES

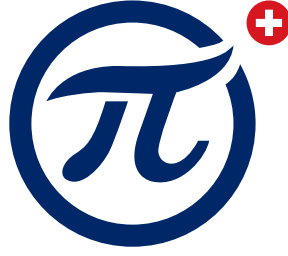


Lamina Technologies is a Swiss manufacturer of carbide cutting tools specializing in milling and turning inserts, made of state-of-the-art sub-micron grades developed by our R&D team in our factory in Switzerland.

With the Multi-Mat™ concept, Lamina Technologies provides products that machine multiple materials with the same insert allowing users to increase flexibility, reduce stock of unused and redundant cutting tools resulting in reduced cost of production and increased production efficiency.

- Simplify your process
- Decrease your tooling costs
- Minimize your machining down time
- Increase your production efficiency

Lamina continues its fast pace worldwide expansion and is currently represented in over 32 countries.



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