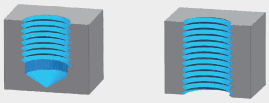
NEW
PRODUCT!

ATM60

Universal thread milling cutter with indexable insert

Suitable for medium and large diameter internal thread machining

Product range overview of thread milling holder

Tools	Series	ATM60
	Thread depth	2.5XDN
	Description	Single-row thread milling cutter with indexable inserts
	Insert grade	AP320U
	Insert type	TM60、TM55
	Coolant supply	Internal coolant
	Thread type	M； MF； MJ； UNC； UNF； UNEF； UN； UNJ； G；
	Threaded hole	

Indexable thread milling denomination - holder

A	TM	60	—	024	—	Z01	—	068	—	W	25	R	—	09	—	007
1	2	3		4		5		6		7	8	9		10		11

1
Product Group
ACHTECK

2
Family Code
Thread milling cutter

3
Insert shape
T-Type

4
Cutter diameter
14
19
24
30
35
……

5
Teeth
01
03

6
Effective length of holder
52
55
68
80
……

7:8
Shank type and size
W16 Weldon shank 16
W20 Weldon shank 20
W25 Weldon shank 25
W32 Weldon shank 32
W40 Weldon shank 40

9
Rotating direction
Right

10
Insert size
06
09
11
14

11
Axial distance between rows
6
7
12
……
No number indicates single row

Indexable thread milling denomination - inserts

TM	60	G	—	09	02	02	E	—	MU1		AP320U
1	2	3		4	5	6	7		8		9

1
Category
Thread milling inserts

2
Insert type
Triangle positive insert with 60° thread angle
Triangle positive insert with 55° thread angle
.....

3
Process
G- Ground insert
M-Pressed

4
Size
06
09
11
14

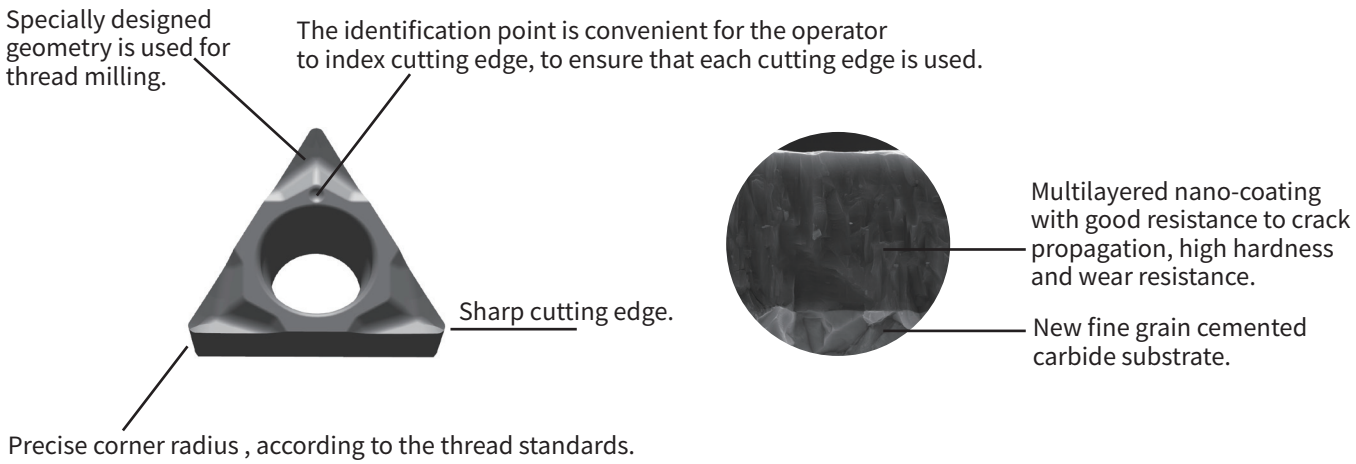
5
Thickness
T1=1.98
02=2.38
03=3.18

6
Corner radius
01
02
04

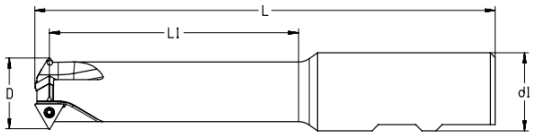
7
Edge Type
E-type

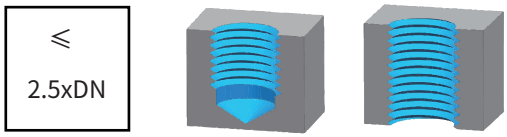
8
Chip breaker
MU1 Universal

9
Grade



Indexable thread milling holder ATM60



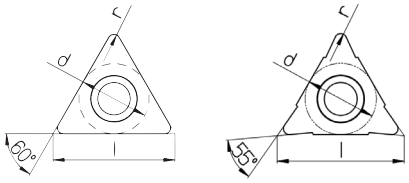


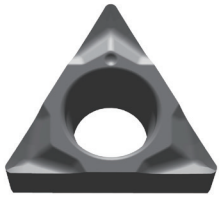
Product code	Dimension						Z	Internal coolant	Insert QTY	Type
	DN	Pmax mm	D mm	L1 mm	L mm	d1 mm				
ATM60-016-Z03-052-W16R-06	M20	2.5	16	52	108	16	3		3	TM-06
ATM60-019-Z03-055-W20R-06	M24	3	19	55	115	20	3		3	TM-06
ATM60-024-Z03-080-W25R-09	M30	3.5	24	80	148	25	3		3	TM-09
ATM60-030-Z03-090-W32R-09	M36	4	30	90	162	32	3		3	TM-09
ATM60-035-Z03-110-W32R-11	M42	4.5	35	110	180	32	3		3	TM-11
ATM60-040-Z03-125-W40R-14	M48	5	40	125	208	40	3		3	TM-14
ATM60-044-Z03-150-W40R-14	M56	5.5	44	150	232	40	3		3	TM-14

With internal coolant
Without internal coolant

Dimension（mm）	Accessories		
Cutter diameter	Screw	Wrench	Torque
16-19	SP020043	DT-TP06	0.6Nm
24-30	SP022049H	DT-TP07	0.9Nm
35	SP025066	DT-TP07	0.9Nm
40-44	SP030077	DT-TP09	2.0Nm

Thread milling inserts TM60G、TM55G



Insert	Product code	r mm	Pitch mm	Pitch inch	Grade
					AP320U
	TM60G-06T101E-MU1	0.1	1.5-2.9	18-9	●
	TM60G-06T102E-MU1	0.2	3	8	●
	TM60G-090201E-MU1	0.1	1.5-2.9	18-9	●
	TM60G-090202E-MU1	0.2	3.0-4.0	8-6	●
	TM60G-110201E-MU1	0.1	1.5-2.9	18-9	●
	TM60G-110202E-MU1	0.2	3.0-4.5	8-6	●
	TM60G-140301E-MU1	0.1	1.5-2.9	18-9	●
	TM60G-140302E-MU1	0.2	3.0-5.0	8-5	●
	TM60G-140304E-MU1	0.4	5.0-6.0	5-4	●
	TM55G-090202E-MU1	0.2		11	●
	TM55G-140302E-MU1	0.2		11	●

Remarked: ● stocked
○ Non-stocked

Tool selection

Metric thread

Holder product code	D mm	Insert	Coarse pitch	Fine pitch
ATM60-016-Z03-052-W16R-06	16	TM60G-06T101	M20; M22;	M20X1.5; M20X2;
ATM60-019-Z03-055-W20R-06	19	TM60G-06T101		M22X1.5; M22X2; M24X1.5; M24X2; M25X1.5; M26X1.5;
		TM60G-06T102	M24; M27;	
ATM60-024-Z03-080-W25R-09	24	TM60G-09T201		M27X1.5; M27X2; M28X1.5; M28X2; M30X1.5; M30X2; M32X1.5; M32X2; M33X1.5; M33X2;
		TM60G-09T202	M30; M33;	
ATM60-030-Z03-090-W32R-09	30	TM60G-09T201		M34X1.5; M35X1.5; M36X1.5; M36X2; M38X1.5; M39X1.5; M39X2;
		TM60G-09T202	M36; M39;	M36X3; M39X3;
ATM60-035-Z03-110-W32R-11	35	TM60G-11T101		M39X1.5; M39X2; M40X1.5; M40X2; M42X1.5; M42X2;
		TM60G-11T202	M42; M45;	M40X3; M42X3;
ATM60-040-Z03-125-W40R-14	40	TM60G-140301		M45X1.5; M45X2, M48X2;
		TM60G-140302	M48; M52;	M45X3; M48X3;
ATM60-044-Z03-150-W40R-14	44	TM60G-140301		M50X1.5; M50X2; M52X1.5; M52X2; M56X1.5; M56X2; M58X1.5; M60X1.5; M60X2; M64X1.5; M64X2; M68X1.5; M68X2;
		TM60G-140302		M50X3; M52X3; M56X3; M60X3; M64X3; M68X3;
		TM60G-140304	M56; M60; M64; M68;	

ANSI UN thread

Holder product code	D mm	Insert	UNC	UNF	UNEF	UN
ATM60-016-Z03-052-W16R-06	16	TM60G-06T101	7/8-9;	3/4-16; 7/8-14; 1-12;		7/8-12; 7/8-16;
		TM60G-06T102				
ATM60-019-Z03-055-W20R-06	19	TM60G-06T101		1-12; 1 1/8-12; 1 1/4–12;	1 1/16-18;	1-16;
		TM60G-06T102	1-8;			1 1/16-8;
ATM60-024-Z03-080-W25R-09	24	TM60G-090201		1 1/8-12; 1 1/4-12;	1 1/8-18; 1 1/4-18;	1 1/8-16; 1 1/4-16;
		TM60G-090202	1 1/8-7; 1 1/4-7; 1 3/8-6;			1 1/8-8; 1 1/4-8;
ATM60-030-Z03-090-W32R-09	30	TM60G-090201		1 3/8-12; 1 1/2-12;	1 3/8-18; 1 1/2-18;	1 3/8-16; 1 1/2-18;
		TM60G-090202	1 1/2-6;			1 3/8-8; 1 1/2-8;
ATM60-035-Z03-110-W32R-11	35	TM60G-110201			1 5/8-18;	1 5/8-12; 1 5/8-16;
		TM60G-110202				1 5/8-6; 1 5/8-8; 1 3/4-6; 1 3/4-8;
ATM60-040-Z03-125-W40R-14	40	TM60G-140301				1 3/4-12; 1 3/4-16; 1 7/8-12; 1 7/8-16;
		TM60G-140302				1 7/8-6; 1 7/8-8;
ATM60-044-Z03-150-W40R-14	44	TM60G-140301				2-12; 2-16; 2 1/8-12; 2 1/8-16; 2 1/4-12; 2 1/4-16; 2 1/2-12; 2 1/2-16;
		TM60G-140302				2-6; 2-8; 2 1/8-6; 2 1/8-8; 2 1/4-6; 2 1/4-8; 2 1/2-6; 2 1/2-8;
		TM60G-140304	2-4.5; 2 1/4-4.5; 2 1/2-4;			

G-Thread(BSP)

Holder product code	D mm	Insert	G
ATM60-024-Z03-080-W25R-09	24	TM55G-090202	G1-11; G1 1/8-11; G1 1/4-11;
ATM60-030-Z03-090-W32R-09	30	TM55G-090202	G1 1/8-11; G1 1/4-11; G1 3/8-11; G1 1/2-11;
ATM60-040-Z03-125-W40R-14	40	TM55G-140302	G1 1/2-11; G1 3/4–11; G2–11;
ATM60-044-Z03-150-W40R-14	44	TM55G-140302	G1 3/4–11; G2–11; G2 1/4–11; G2 1/2–11; G3–11;

Indexable thread milling holder

Materials							ATM60			
ISO	Workpiece material			Brinell hardness (HB/HRC)	Tensile strength Rm(N/mm²)	Cutting speed Vc m/min	fz(mm) Insert Size			
							06	09	11/14	
P	Unalloyed steel	C≤0.25%	Annealed	125	428	180	0.3	0.35	0.4	
		0.25<C≤0.55%	Annealed	190	639	180	0.3	0.35	0.4	
		0.25<C≤0.55%	Heat-treated	210	708	180	0.3	0.35	0.4	
		C>0.55%	Annealed	190	639	180	0.3	0.35	0.4	
		C>0.55%	Heat-treated	300	1013	180	0.25	0.3	0.35	
		Free cutting steel (short-chip)	Annealed	220	745	180	0.3	0.35	0.4	
	Low-alloyed steel	Annealed		175	591	180	0.3	0.35	0.4	
		Heat-treated		300	1013	180	0.3	0.35	0.4	
		Heat-treated		380	1282	130	0.2	0.3	0.35	
		Heat-treated		430	1477	80	0.15	0.2	0.3	
	High-alloyed steel and high-alloyed tool steel	Annealed		200	675	180	0.25	0.35	0.4	
		Hardened and tempered		300	1013	180	0.25	0.35	0.4	
		Hardened and tempered		400	1361	130	0.25	0.3	0.35	
	Stainless steel	Ferritic/martensitic, annealed		200	675	180	0.25	0.3	0.35	
		Martensitic, heat-treated		330	1114	130	0.25	0.3	0.35	
M	Stainless steel	Austenitic, quench hardened		200	675	180	0.2	0.3	0.35	
		Austenitic, precipitation hardened (PH)		300	1013	130	0.2	0.3	0.35	
		Austenitic/ferritic, duplex		230	778	80	0.2	0.3	0.35	
K	Malleable cast iron	Ferritic		200	400	180	0.3	0.35	0.4	
		Pearlitic		260	700	180	0.3	0.35	0.4	
	Grey cast iron	Low tensile strength		180	200	250	0.3	0.35	0.4	
		High tensile strength/austenitic		245	350	180	0.3	0.35	0.4	
	Nodular cast iron	Ferritic		155	400	180	0.3	0.35	0.4	
		Pearlitic		265	700	180	0.3	0.35	0.4	
	GGV(CGI)			230	400	180	0.3	0.35	0.4	
N	Wrought aluminium alloys	Non-aging		30	-					
		Aged		100	340					
	Cast aluminium alloys	≤ 12% Si, non-aging		75	260					
		≤ 12% Si, aged		90	310	200	0.3	0.35	0.4	
		> 12% Si, non-aging		130	450	240	0.3	0.35	0.4	
	Magnesium alloys			70	250					
	Copper and copper alloys	Unalloyed, electrolytic copper		100	340					
		Brass, bronze, red brass		90	310					
		Cu alloys, short-chipping		110	380					
		High-tensile, Ampco alloy		300	1010					
S	Heat-resistant alloys	Fe-based	Annealed	200	680	35	0.2	0.2	0.2	
			Hardened	280	940	20	0.1	0.1	0.1	
		Ni or Co based	Annealed	250	840	35	0.2	0.2	0.2	
			Hardened	350	1180	20	0.1	0.1	0.1	
			Cast	320	1080	30	0.2	0.2	0.2	
	Titanium alloys	Pure titanium		200	680	35	0.2	0.2	0.2	
		α and β alloys, hardened		375	1260	35	0.2	0.2	0.2	
		β alloys		410	1400	25	0.2	0.2	0.2	
	Tungsten alloys			300	1010	35	0.2	0.2	0.2	
	Molybdenum alloys			300	1010	35	0.2	0.2	0.2	
H	Hardened steel	Hardened and tempered		50HRC		40	0.15	0.2	0.2	
		Hardened and tempered		55HRC						
		Hardened and tempered		60HRC						
	Hardened cast steel	Hardened and tempered		50HRC		40	0.15	0.2	0.2	

The recommended cutting parameters are theoretical values.
According to the applications, cutting data need to be adjusted.