

NEW
PRODUCT!

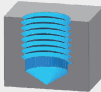
ATM60

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	2	3	4	5	6
Product Group	Family Code	Insert shape	Cutter diameter	Teeth	Effective length of holder
ACHTECK	Thread milling cutter	T-Type	14	01	52
			19	03	55
			24		80
			30		90
			35		
					

7:8	9	10	11
Shank type and size	Rotating direction	Insert size	Axial distance between rows
W16 Weldon shank 16	Right	06	6
W20 Weldon shank 20		09	7
W25 Weldon shank 25		11	12
W32 Weldon shank 32		14	
W40 Weldon shank 40			No number indicates single row

Indexable thread milling denomination - inserts

TM	60	G							
1	2	3	09	02	02	E	MU1	AP320U	
			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

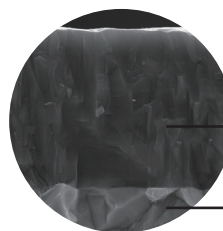
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Grade

Specially designed geometry is used for thread milling.

The identification point is convenient for the operator to index cutting edge, to ensure that each cutting edge is used.

Sharp cutting edge.

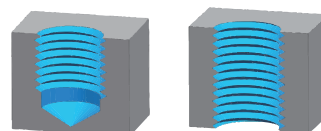
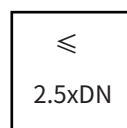
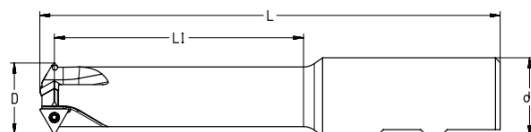
Precise corner radius , according to the thread standards.



Multilayered nano-coating with good resistance to crack propagation, high hardness and wear resistance.

New fine grain cemented carbide substrate.

Indexable thread milling holder ATM60

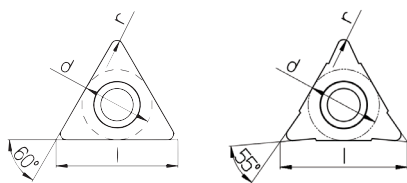


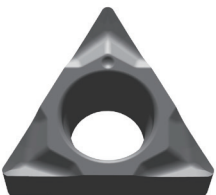
Product code	Dimension						Z	Internal coolant	Insert QTY	Type
	DN	P _{max} mm	D mm	L1 mm	L mm	d1 mm				
ATM60-016-Z03-052-W16R-06	M20	2.5	16	52	108	16	3		3	TM-06
ATM60-019-Z03-055-W20R-06	M24	3	19	55	115	20	3		3	TM-06
ATM60-024-Z03-080-W25R-09	M30	3.5	24	80	148	25	3		3	TM-09
ATM60-030-Z03-090-W32R-09	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-090201		M27X1.5; M27X2; M28X1.5; M28X2; M30X1.5; M30X2; M32X1.5; M32X2; M33X1.5; M33X2;
		TM60G-090202	M30; M33;	
ATM60-030-Z03-090-W32R-09	30	TM60G-090201		M34X1.5; M35X1.5; M36X1.5; M36X2; M38X1.5; M39X1.5; M39X2;
		TM60G-090202	M36; M39;	M36X3; M39X3;
ATM60-035-Z03-110-W32R-11	35	TM60G-110201		M39X1.5; M39X2; M40X1.5; M40X2; M42X1.5; M42X2;
		TM60G-110202	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/mm ²)	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
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.