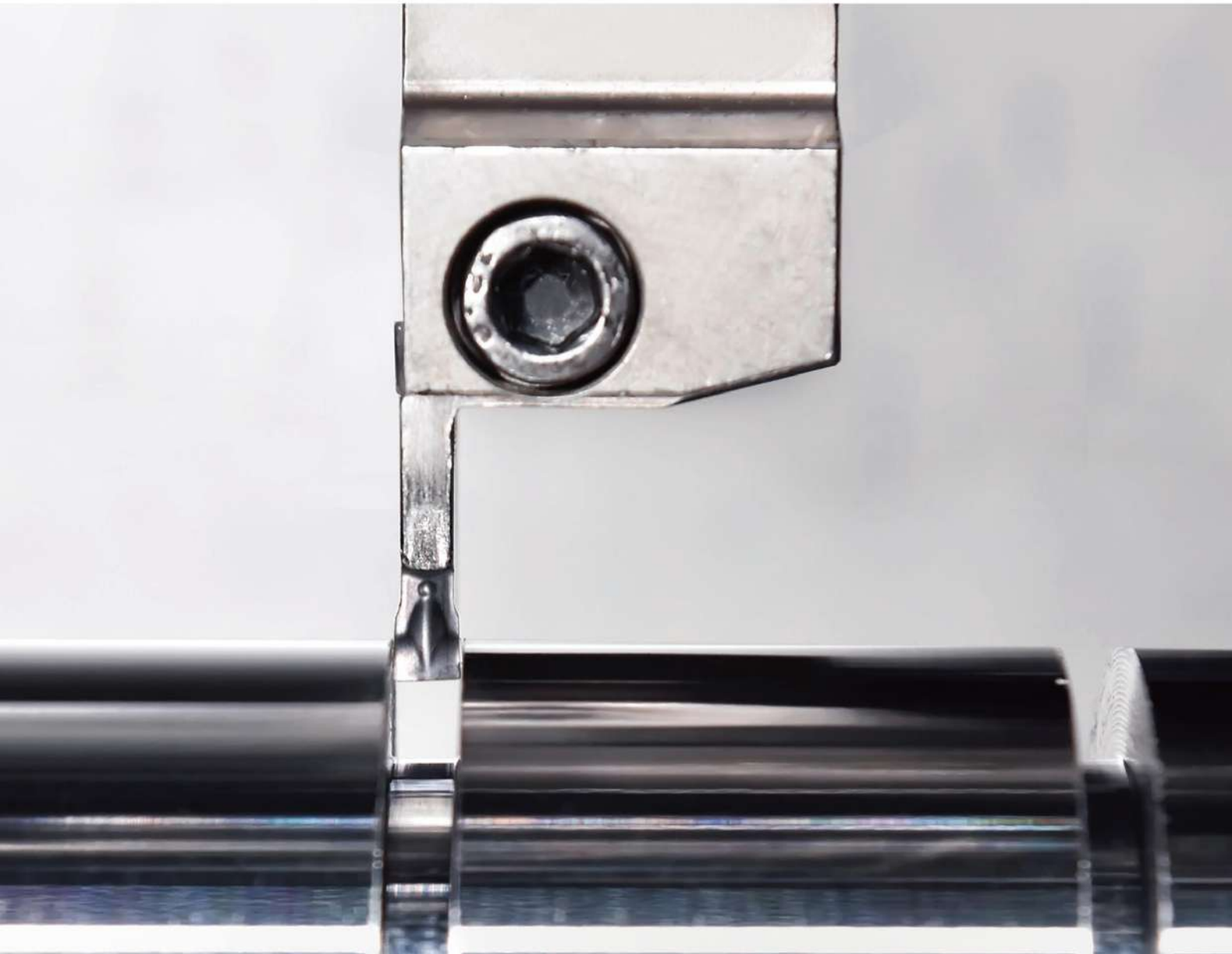


NEW
PRODUCT!

CS/CM/CH

Grooving Series

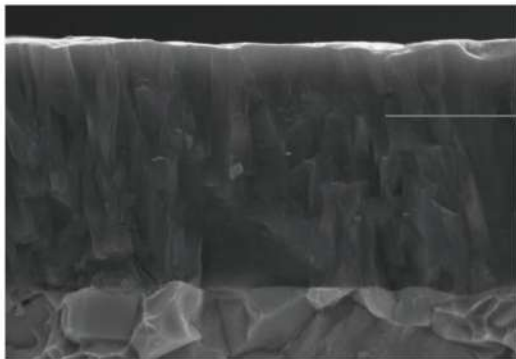
Parting off and grooving



• AP301U Grade Feature

Kind of coating: PVD

ISO range: P15-P35, M15-M35



TiAlN PVD coating

- Excellent high-temperature oxidation resistance and wear resistance.
- Very smooth coating surface.
- Good adhesion between substrate and coating for longer tool life.

• Grade application



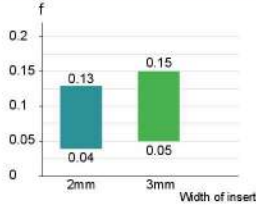


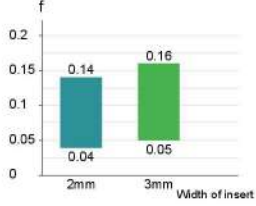


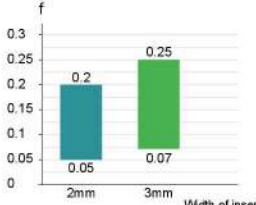
Grade	Coating	Material					
		P	M	K	S	N	H
AP301U	PVD	●	●	◐	◐		

● Marked : 1st Choice ◐ Marked : 2nd Choice

• Recommended cutting speed

Material	Steel	Stainless steel	Cast iron	Super alloy
Cutting speed Vc(m/min)	60-250	60-180	30-200	20-150

• **Chip breaker features**

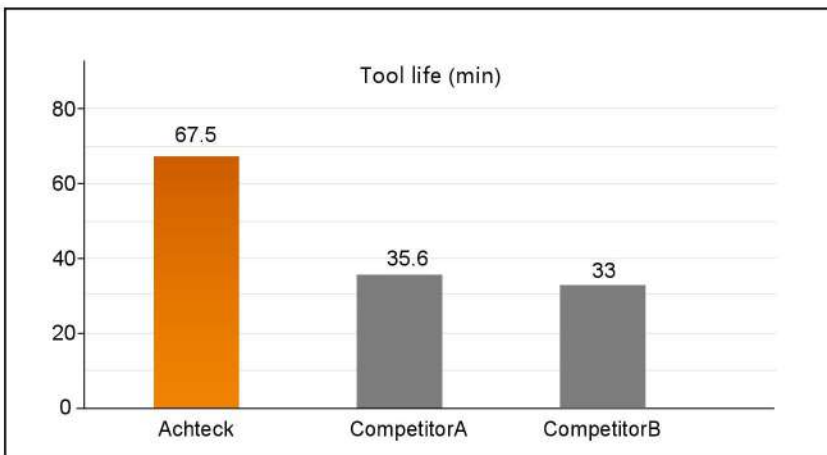
Geometry	Insert picture	Edge preparation	Recommended feed (mm/rev)	Application
CS				<ol style="list-style-type: none"> 1. Suitable for parting off and grooving on stainless steel, super alloys and mild steel 2. Low feed rate
CM				<ol style="list-style-type: none"> 1. Suitable for parting off, grooving on stainless steel, and mild steel 2. For soft materials such as tubes, small diameters and thin walled parts 3. For low cutting force 4. Low to medium feed rate
CH				<ol style="list-style-type: none"> 1. Suitable for parting off, grooving on steels, and cast irons 2. Strong cutting edge 3. High feed rate 4. Can be used on stainless steels. 5. First choice

• **Comparison internal tool life test result**

Cutting conditions

Material	Operation	Cutting parameters			
		Vc(m/min)	f(mm/rev)	ap(mm)	Coolant
Alloy steel	Grooving	160	0.2	10	Yes

Test result

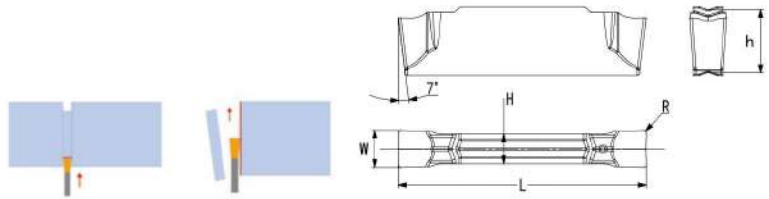


Insert: ACD 302-CH AP301U
 Holder: ATSEL 2525-3T12

● Inserts stock item

- CS

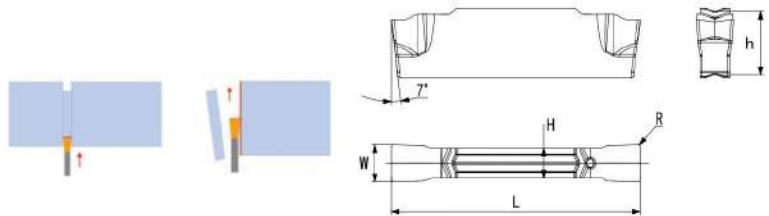
For parting off and grooving



Insert	Type	Dimension					T _{max}	Feed	Grade
		W	R	L	H	h			AP301U
	ACD 202-CS	2	0.2	20	1.7	5.1	19.7	0.04-0.13	●
	ACD 302-CS	3	0.2	20	2.4	5.1	19.7	0.05-0.15	●

- CM

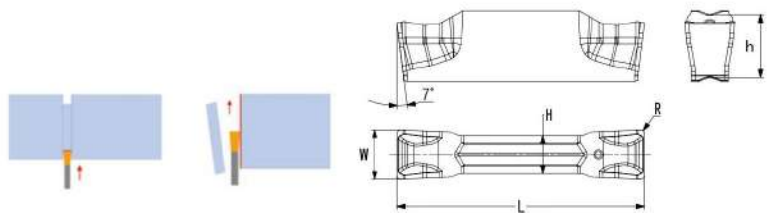
For parting off and grooving



Insert	Type	Dimension					T _{max}	Feed	Grade
		W	R	L	H	h			AP301U
	ACD 202-CM	2	0.2	20	1.7	5.1	19.7	0.04-0.15	●
	ACD 302-CM	3	0.2	20	2.4	5.1	19.7	0.05-0.16	●

- CH

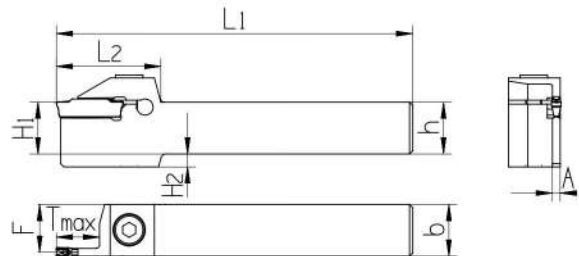
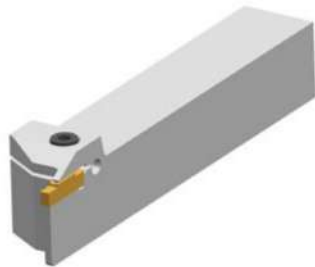
For parting off and grooving



Insert	Type	Dimension					T _{max}	Feed	Grade
		W	R	L	H	h			AP301U
	ACD 202-CH	2	0.2	20	1.7	5.1	19.7	0.05-0.20	●
	ACD 302-CH	3	0.2	20	2.4	5.1	19.7	0.07-0.25	●

Remark: ● represent for standard stock

• **Holder stock item**



Holder type		holder dimension									Insert
		h	b	H ₁	H ₂	A	L ₁	L ₂	F	T _{max}	
ATSER/L	1616-2T12	16	16	16	4	1.8	110	32	15.1	12	ACD 2
	1616-2T17	16	16	16	4	1.8	110	38	15.1	17	
	2020-2T08	20	20	20	0	1.8	125	32	19.1	8	
	2020-2T12	20	20	20	0	1.8	125	32	19.1	12	
	2020-2T17	20	20	20	0	1.8	125	38	19.1	17	
	2525-2T08	25	25	25	0	1.8	150	32	24.1	8	
	2525-2T12	25	25	25	0	1.8	150	32	24.1	12	
ATSER/L	1616-3T12	16	16	16	4	2.4	110	32	14.8	12	ACD 3
	1616-3T20	16	16	16	4	2.4	110	38	14.8	20	
	2020-3T09	20	20	20	0	2.4	125	32	18.8	9	
	2020-3T12	20	20	20	0	2.4	125	32	18.8	12	
	2020-3T20	20	20	20	0	2.4	125	38	18.8	20	
	2525-3T09	25	25	25	0	2.4	150	32	23.8	9	
	2525-3T12	25	25	25	0	2.4	150	32	23.8	12	
	2525-3T20	25	25	25	0	2.4	150	38	23.8	20	

Holder type	Spare part	
	Screw	Wrench
ATSER/L 1616-2/3	 ASH M5x0.8x16	 AWH4
ATSER/L 2020-2/3	ASH M5x0.8x20	AWH4
ATSER/L 2525-2/3	ASH M5x0.8x25	AWH4