



// 2024

Small parts industry tooling solutions



GANZHOU ACHTECK TOOL TECHNOLOGY CO.,LTD.

Add: Ganzhou Economic Development Area, Jiangxi, China
Tel: 400-9150-887 Fax: 0086-797-8166100 E-mail: marketing@achtecktool.com



ACHTECK AMERICA, INC.

Add: 1928 Star Batt Drive, Ste C, Rochester Hills, MI 48309
Tel: +1(947)208-7289 E-mail: zyaacs@achtecktool.com Website: www.achteckamerica.com

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www.achteckamerica.com



Company Profile

Ganzhou Achteck Tool Technology Co., Ltd. is a wholly-owned subsidiary of Chongyi Zhangyuan Tungsten Co., Ltd. (Listed Company with stock code 002378). The registered capital of Achteck is 1.66 billion USD with 800 employees. The main products include: Coated Carbide Inserts, Carbide Rod and supporting tool holders. Achteck is known for its outstanding R&D competence, production & testing equipment and its coated carbide insert production technology. Achteck produces inserts for Turning, Grooving, Milling and Drilling that are widely applied in automotive, energy, die & mold, general machinery, aerospace and other industries. Achteck Tool is technology oriented, owns a strong research team that keeps on innovating. Having "Benefits from Resources, Reliance on Technologies, Devotion to Humanity and Top with Trust" as the operating philosophy and "Safety, Harmony, Efficiency and Innovation" as the target, Achteck aims to become a well-known brand in the world and a first-class cemented carbide manufacturer in China.



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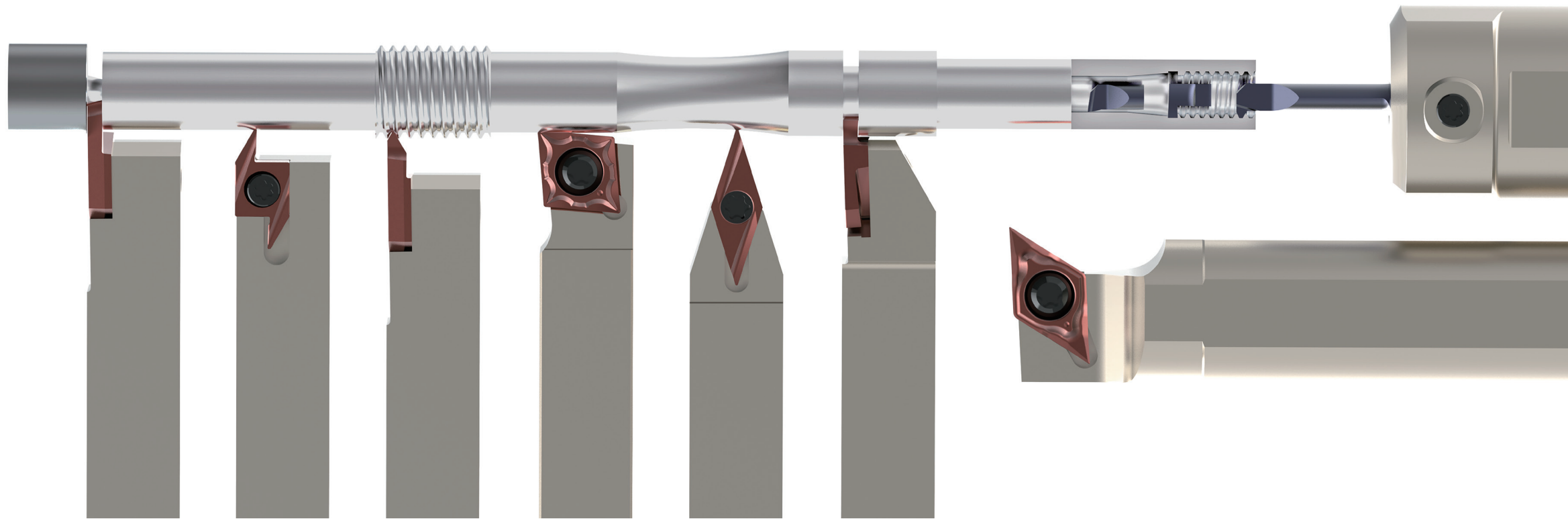
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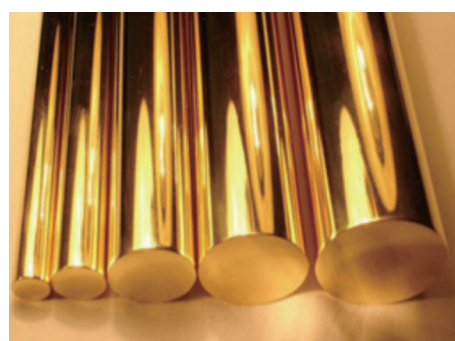
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- Small parts workpiece materials



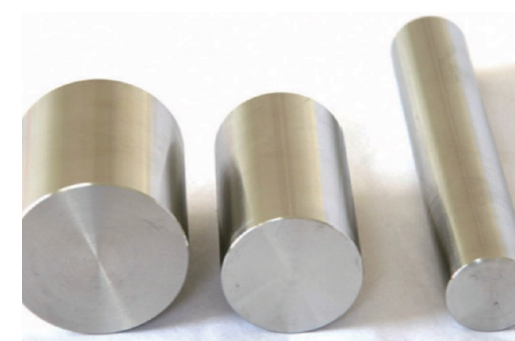
stainless steel



copper



aluminium alloy



titanium alloy

• Insert grades for small parts

Steel (carbon steel, mild steel)

1st choice: AP200U
General choice: AP301M
Medium and low speed continuous condition: AP301U

Stainless steel

1st choice: AP301M
High speed continuous condition: AP100S
Medium and low speed continuous condition: AP301U

• Features of AP301M

1st choice for
general
machining

M15-M35
P15-P35

AP301M

The grade for small parts; suitable for steel and stainless steel, with good anti built-up edge performance.

Features of AP200U

1st choice for
difficult-to
machine
materials

P15-P35
M15-M35
S15-S35

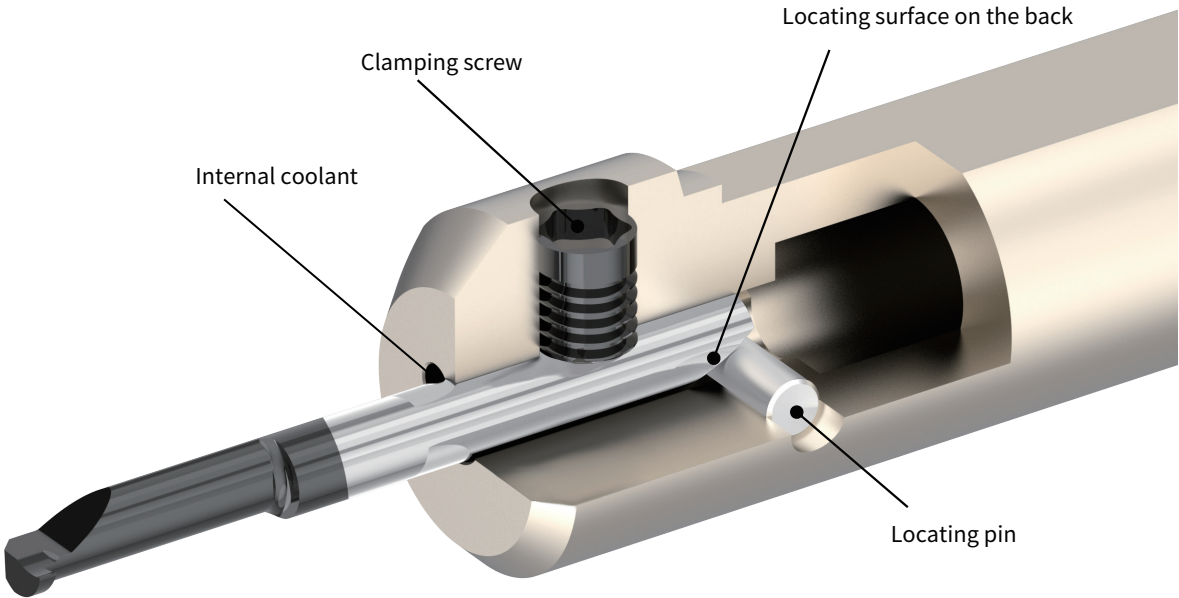
AP200U

PVD coated cemented carbide grade.
Recommended for low carbon steel finishing
under low cutting speed or low feed conditions.

• Range of application

Material	Steel (carbon steel / alloy steel)					Stainless steel					Titanium alloy				
Applications	finish ↔ rough					finish ↔ rough					finish ↔ rough				
ISO category	P01	P10	P20	P30	P40	M01	M10	M20	M30	M40	S01	S10	S20	S30	S40
Grade															
			AP200U					AP301M						AP200U	
			AP301M					AP200U							

• Small Dia. Boring Tool-ASI Tool series



Boring



Face grooving



Threading



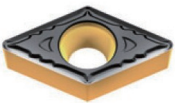
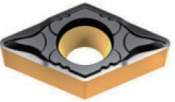
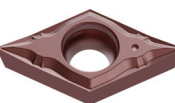
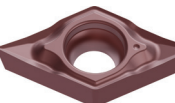
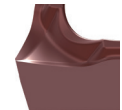
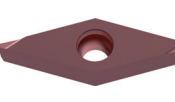
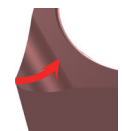
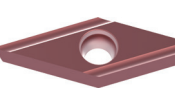
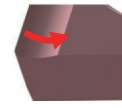
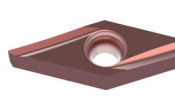
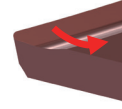
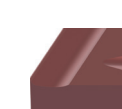
Internal grooving

• New PVD grade AP220U

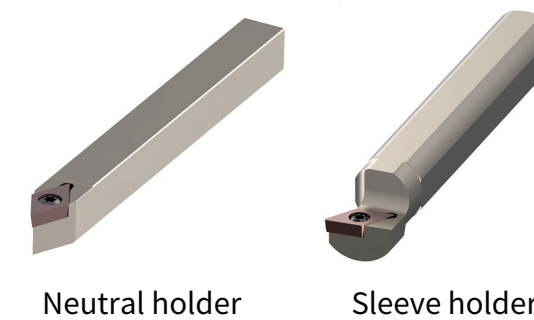
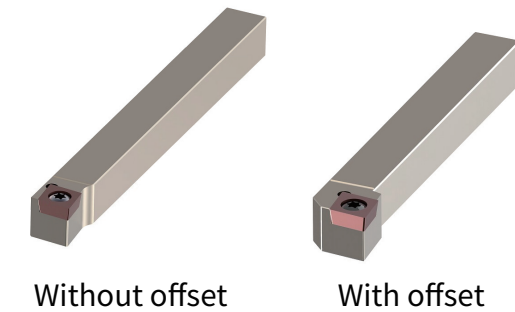
- Minimum machining diameter 0.5mm
- Sleeve tool holder with fully internal cooling for long tool life
- With positioning function, good repeatability
- Grade AP220U for different materials, with excellent wear resistance, stability and good surface finish



• Chip breaker for small parts: PC2, PB1, UF, LF, F, M, Y, H

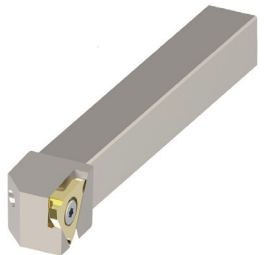
		PC2 Semi-finishing steel and stainless steel, high inclination angle design for light cutting, sharp cutting edge reduces built-up edge, with wide range of chip removal
		PB1 Positive rake angle reduces built-up edge and obtains better surface finish, suitable for stainless steel turning
		UF Sharp cutting edges and large rake angle for good cutting results, with wide cutting range
		LF Large rake angle, designed for low cutting forces and excellent chip removal, suitable for two-directional automatic lathes
		F Excellent chip control at low feed; low cutting forces; for boring and external finish turning
		M Excellent chip control and low cutting forces at different cutting depths under low feed condition
		Y Designed for semi-finishing, with excellent cutting results and wide application range
		UF Suitable for semi-finish turning, sectional chip breaking design at different cutting depth and excellent chip control
		F Low cutting force, excellent chip control and smooth chip removal for good cutting result, suitable for finishing
		H Strong cutting edges, larger feeds, good versatility

• External turning holder for small parts



• ASG Triangular shallow grooving

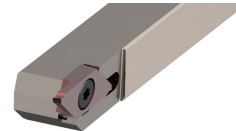
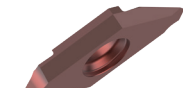
Shank
 Special length for CNC machine, high positioning precision, universal holder



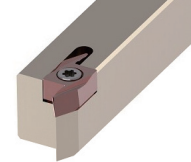
Boring bar
 Used in insufficient space of CNC machine



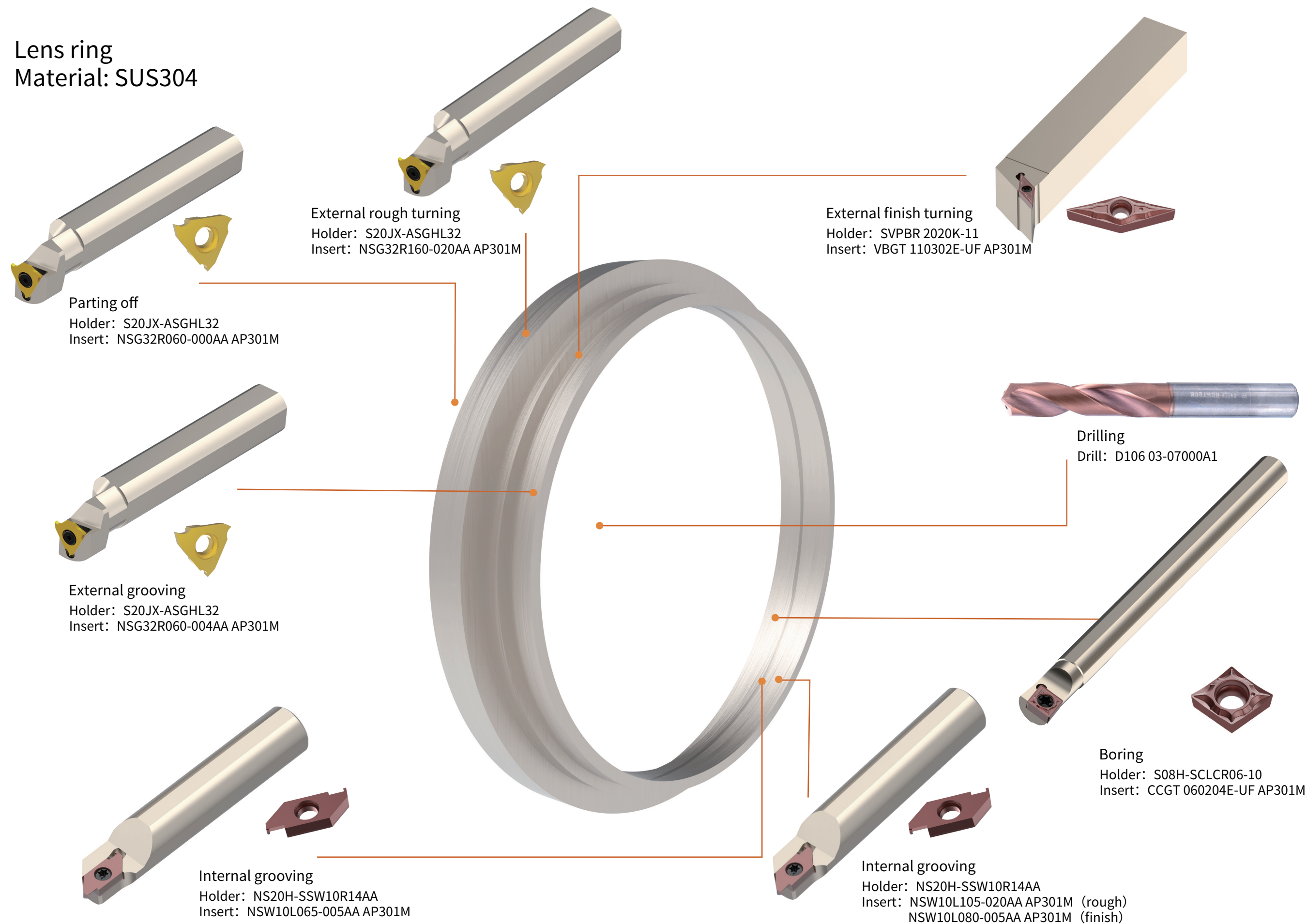
• ASW multifunctional tools for small parts

	ASW Holder Multifunctional holder for parting off, back turning and threading, lower cost
	ASWP Parting off insert Various cutting edge designs for different conditions
	ASWB Back turning insert Sharp cutting edges, large rake angle for large cutting depth and low cutting force
	ASWT Threading insert Strong cutting edges, large feed, good versatility

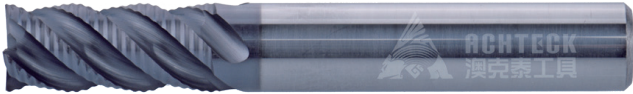
• ABF back turning tools for small parts

	ABF Holder High precision, special tool for CNC machine
	ABF Back turning insert Sharp cutting edges, fully ground insert, excellent chip removal and control, maximum depth 4mm

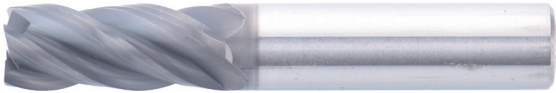
- Lens ring
Material: SUS304



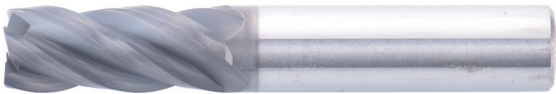
• Watch face housing
Material: SUS316li



φ10 profile rough milling
Solid carbide end mill: M216-4PS-100



φ6 profile semi-finish milling
Solid carbide end mill: M210-4ES-060



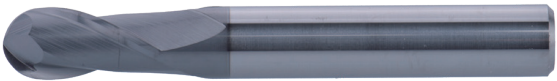
φ2 Root milling
Solid carbide end mill: M200-4ES-020



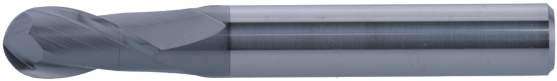
φ3 Drilling
Drill: D106-03-03000A0



φ14 Bottom hole drilling
Drill: D106-03-140000A0



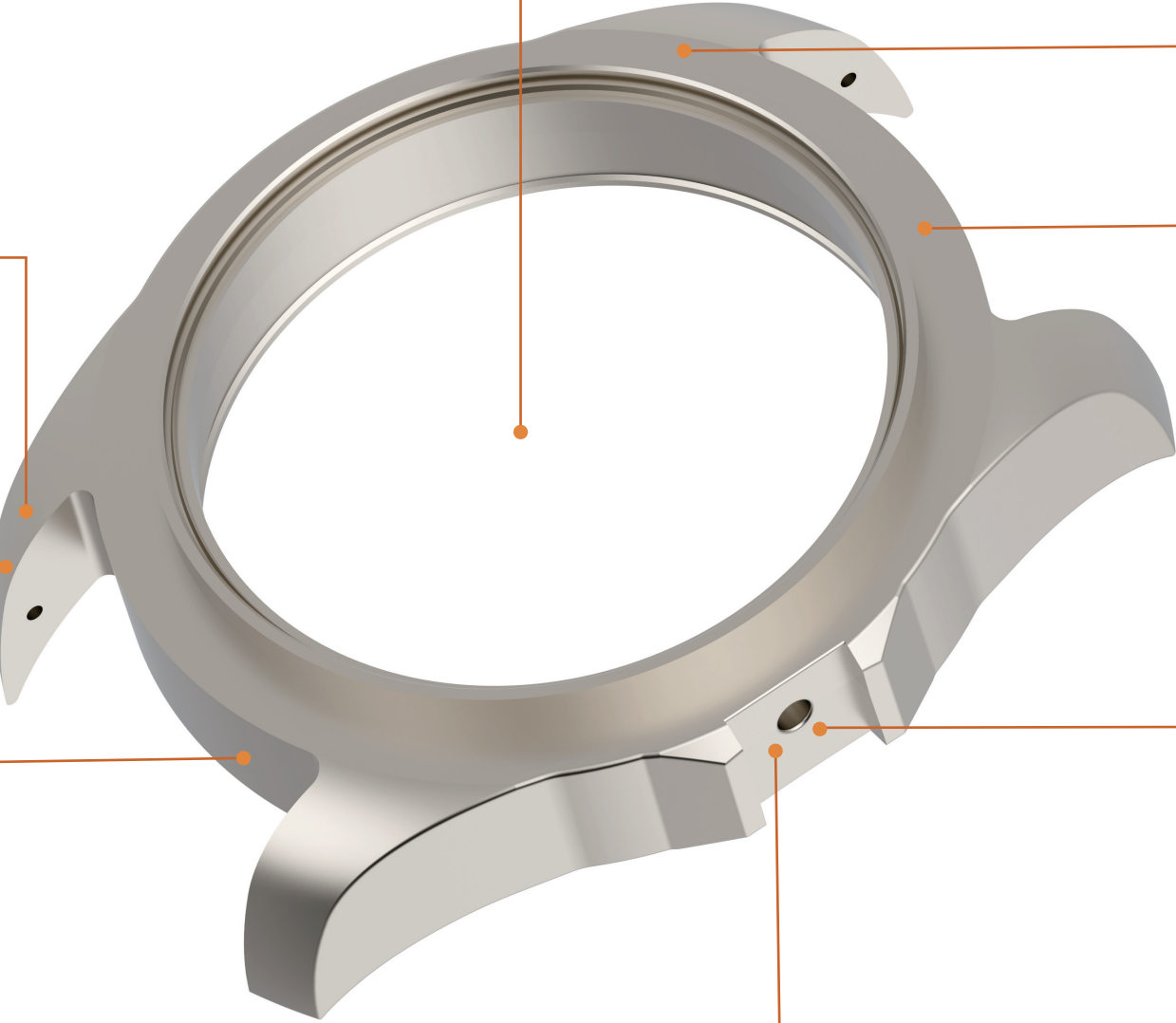
Profile semi-finish milling
Ball-nose mill: M200-2BS-100



Profile finish milling
Ball-nose mill: M200-2BS-040



φ2 Root milling
Solid carbide end mill: M200-4ES-020

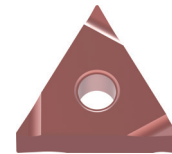


- Watch Bezel
Material: SUS316Li



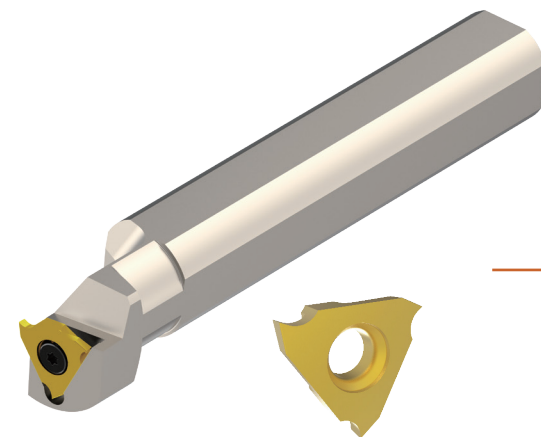
Face finish turning

Holder: PTGNR 2525M-16
Insert: TNGG 160402FR-F AP301M



Finish back turning

Holder: PTGNR 2525M-16
Insert: TNGG 160402FR-F AP301M



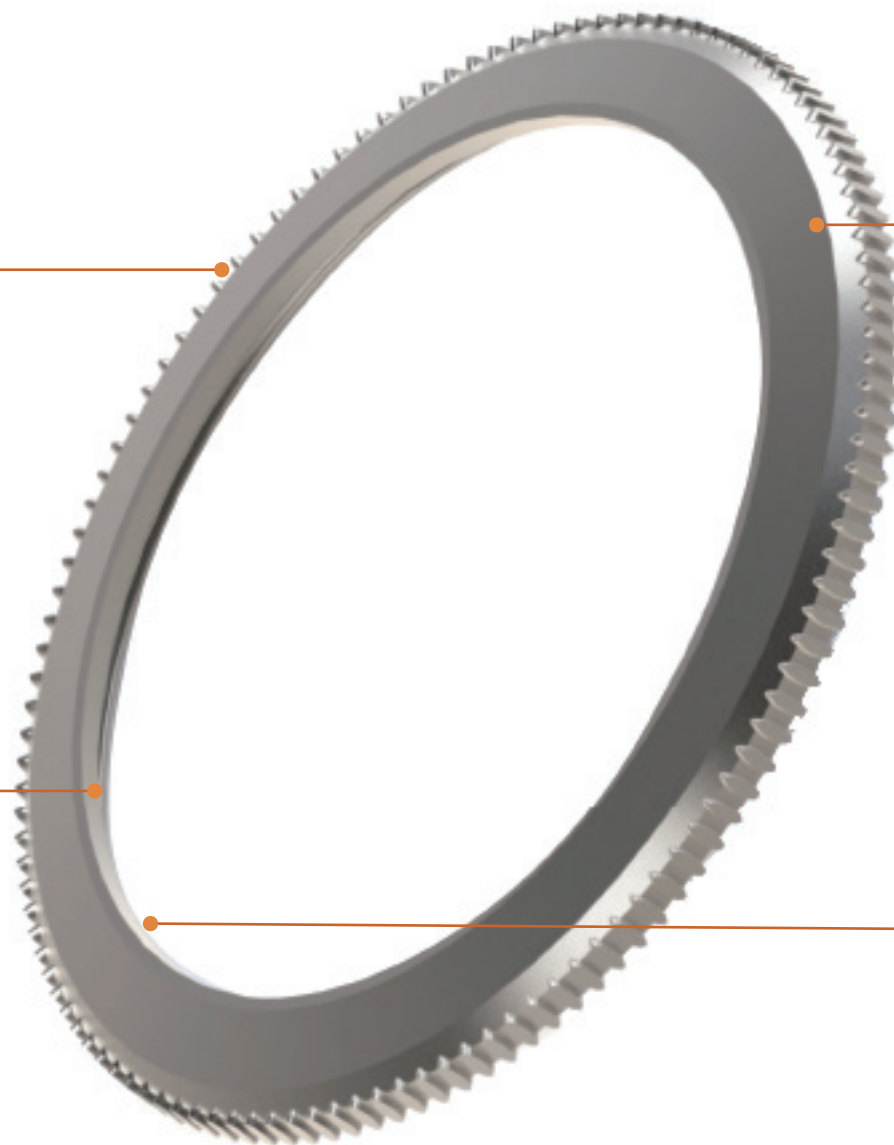
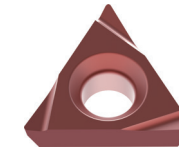
Internal grooving

Holder: ATGIR 25R32-35T28
Insert: ATG 32R033T08-R005 AP301U

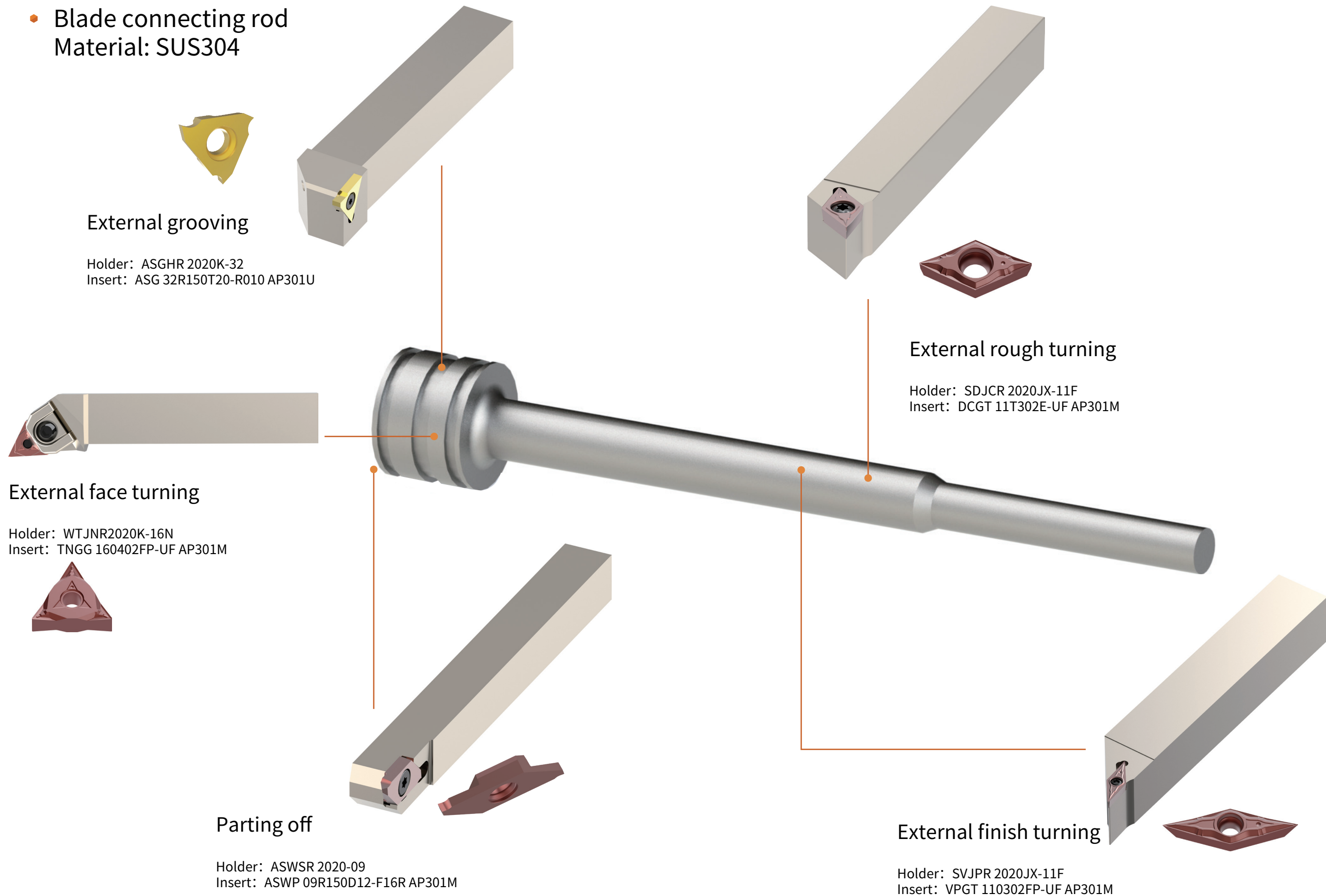


Boring

Holder: BAR1620-83
Insert: TPEH 110302FL-F AP301M



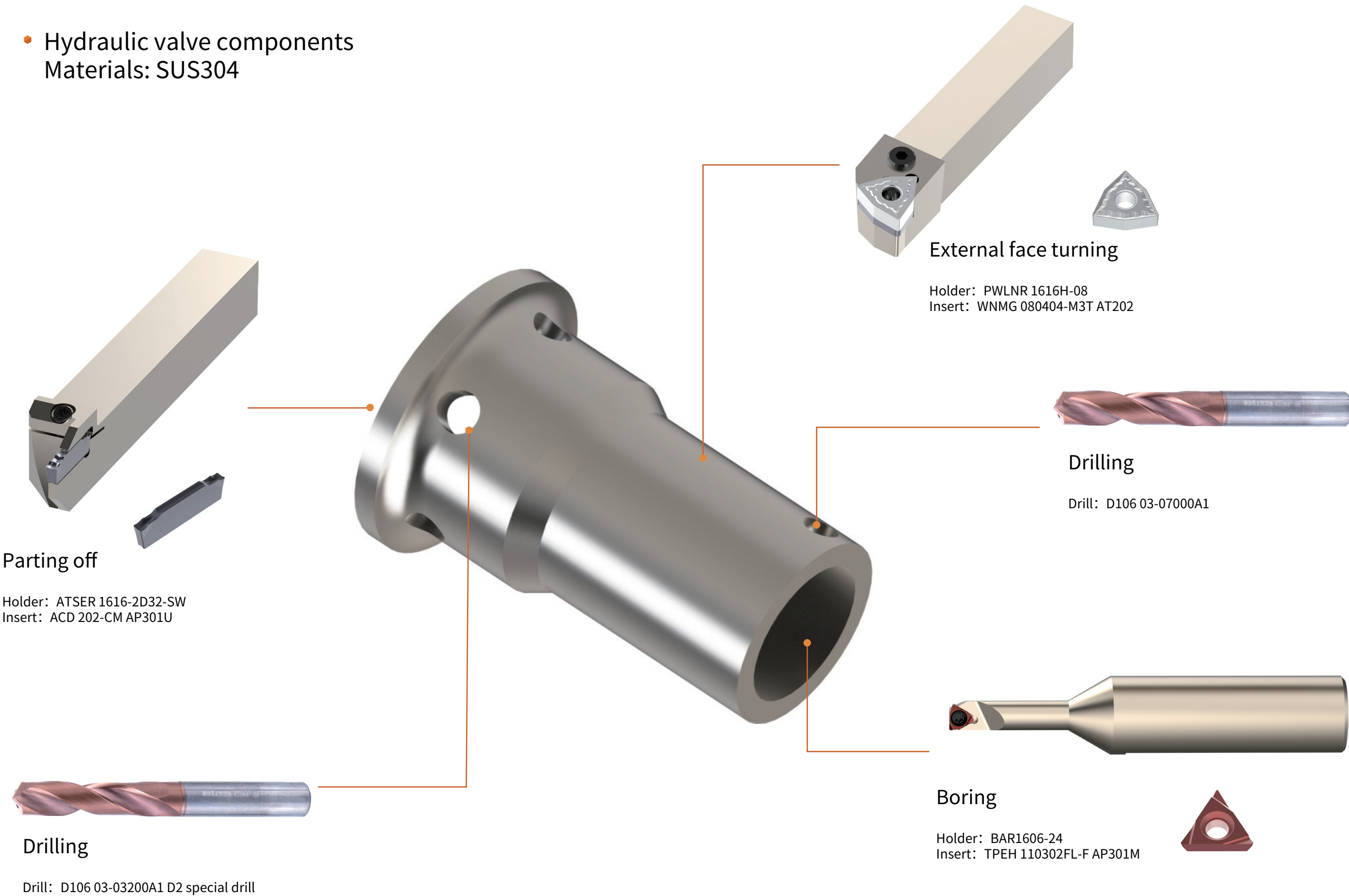
- Blade connecting rod
Material: SUS304



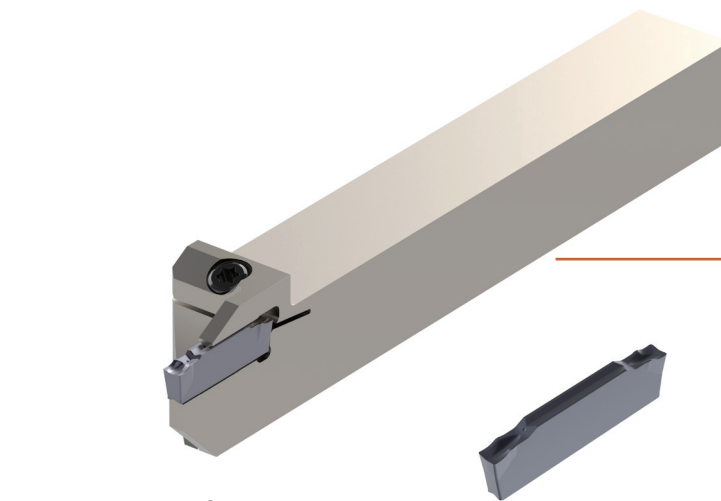
- Sensor component
Material: SUS316li



- Hydraulic valve components
Materials: SUS304

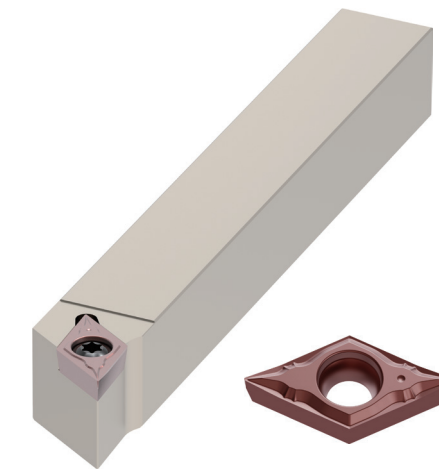


- Industrial lens base
Material: SUS304



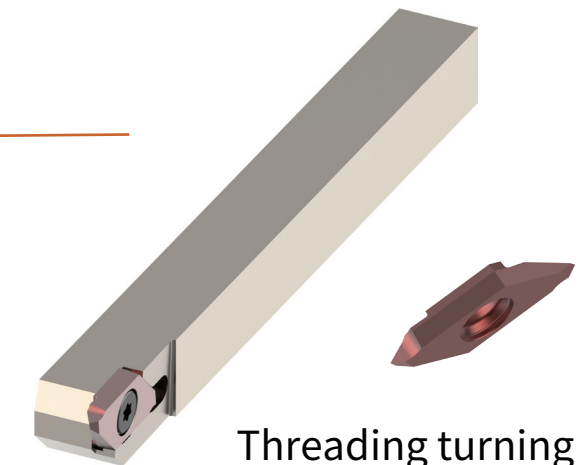
Parting off

Holder: ATSER 1616-2D32-SW
Insert: ACD 202-CM-6R AP301U



External face turning

Holder: SDJCR 1616JX-11F
Insert: DCGT 11T302E-UF AP301M



Threading turning

Holder: ASWSR 1616-09
Insert: ASWT 09R60005-FR AP301M



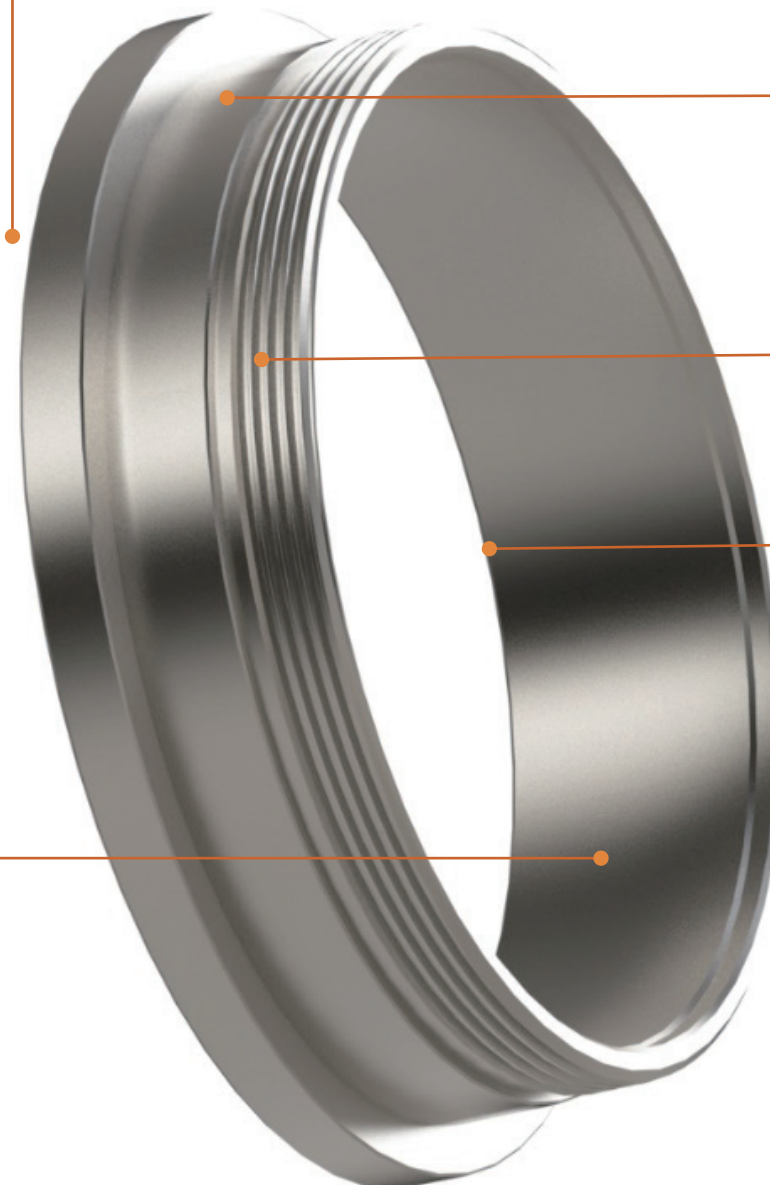
Boring

Holder: A12M-SVUCR08-16AE
Insert: NVC08L000-005AA AP301M



Drilling

Drill: D151-03-19000A1



- Joint components
Material: SUS304

External face turning

Holder: SDJCR 1616JX-11F
Insert: DCGT 11T302E-UF AP301M

External grooving

Holder: ASGHR 1212JX-32
Insert: ASG 32R150T20-R010 AP301U

Boring

Holder: ASI 0020-06
Insert: ASIBR 06T020-6225 AP220U

Threading

Holder: ASWSR 1212-09
Insert: ASWT 09R60005-FRAP301M

Drilling

Drill: D106 03-07000A1

Hexagonal milling

Solid carbide end mill: M200-4ES-030

Chamfer milling

Solid carbide end mill: M180-4WS-060

External face turning

Holder: S20JX-SDUCL11
Insert: DCGT 11T302E-UF AP301M

Parting off

Holder: ASWSR 2020-09
Insert: ASWP 09R150D12-F16R AP301M

Backturning

Holder: ABFSR 1212-07
Insert: ABF 07R280005-FR AP301M



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