



// 2024

Small parts industry tooling solutions



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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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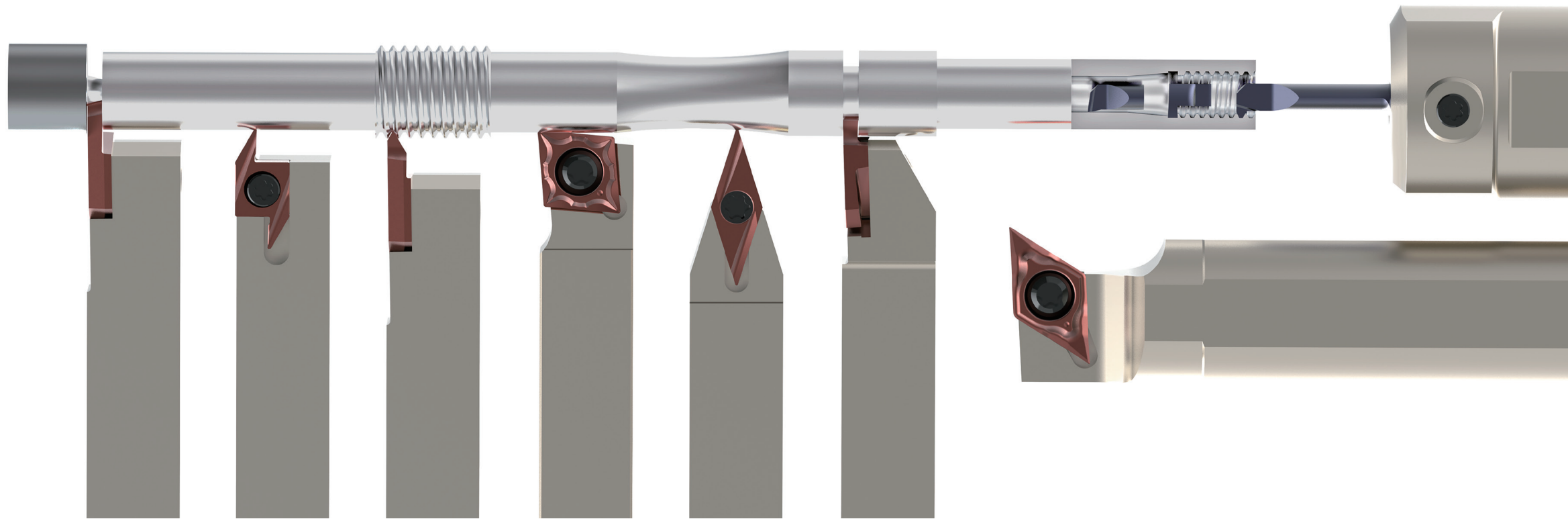
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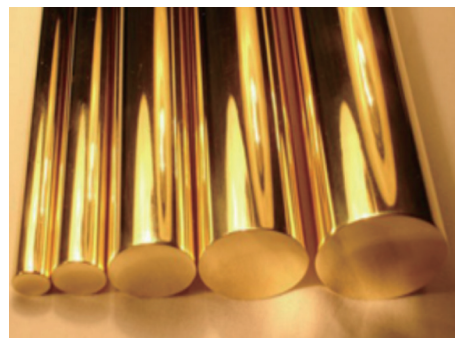
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- Small parts workpiece materials



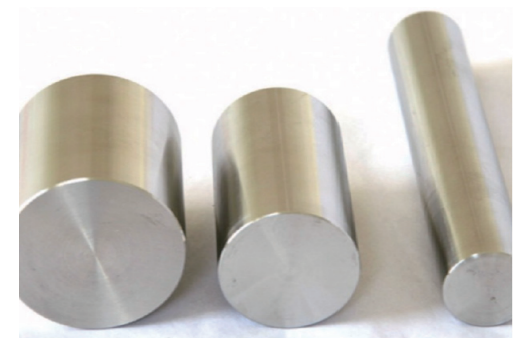
stainless steel



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

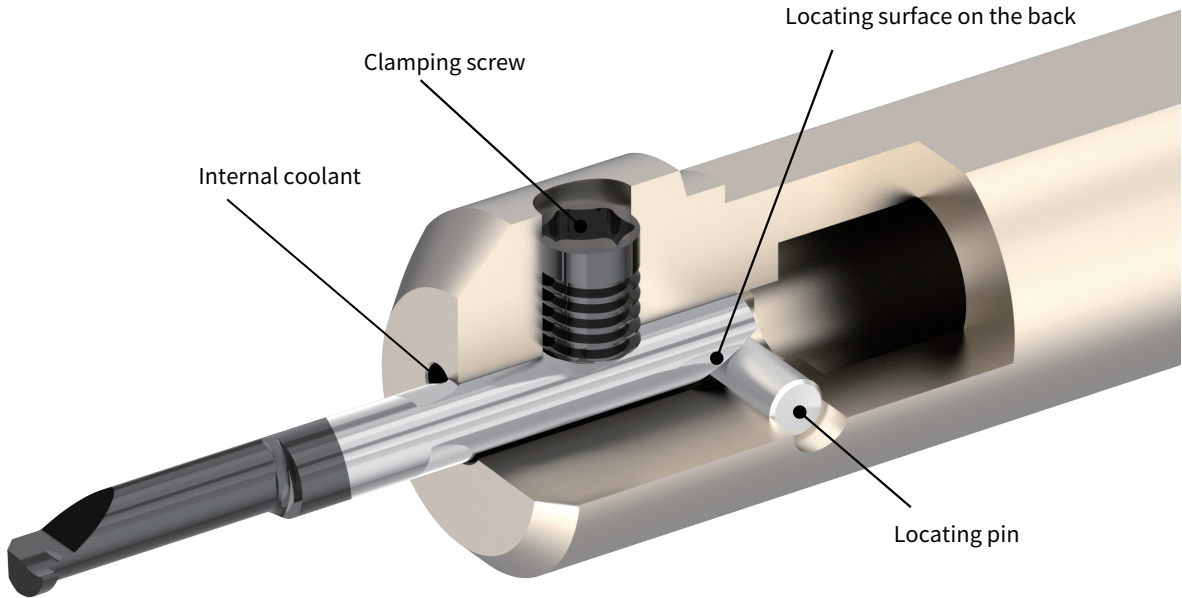
AP200U

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



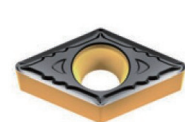
Internal grooving

New PVD grade AP220U

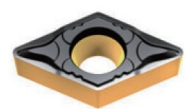
- Minimum machining diameter 0.5mm
- Sleeve tool holder with fully internal cooling for long tool life
- With positioning function, good repeatability
- Grade AP220U for different materials, with excellent wear resistance, stability and good surface finish



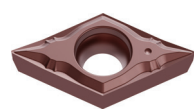
• Chip breaker for small parts: PC2, PB1, UF, LF, F, M, Y, H



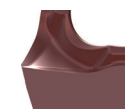
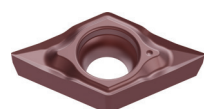
PC2
Semi-finishing steel and stainless steel, high inclination angle design for light cutting, sharp cutting edge reduces built-up edge, with wide range of chip removal



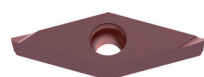
PB1
Positive rake angle reduces built-up edge and obtains better surface finish, suitable for stainless steel turning



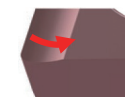
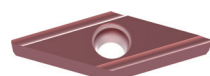
UF
Sharp cutting edges and large rake angle for good cutting results, with wide cutting range



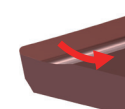
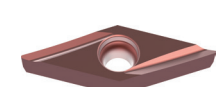
LF
Large rake angle, designed for low cutting forces and excellent chip removal, suitable for two-directional automatic lathes



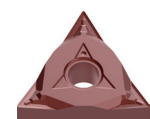
F
Excellent chip control at low feed; low cutting forces; for boring and external finish turning



M
Excellent chip control and low cutting forces at different cutting depths under low feed condition



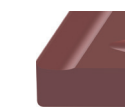
Y
Designed for semi-finishing, with excellent cutting results and wide application range



UF
Suitable for semi-finish turning, sectional chip breaking design at different cutting depth and excellent chip control

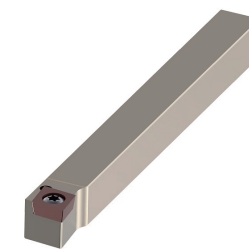


F
Low cutting force, excellent chip control and smooth chip removal for good cutting result, suitable for finishing



H
Strong cutting edges, larger feeds, good versatility

• External turning holder for small parts



Without offset

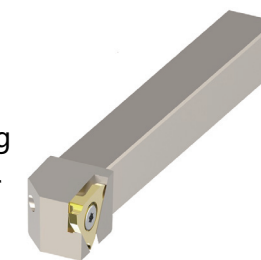


With offset

• ASG Triangular shallow grooving

Shank

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



Neutral holder



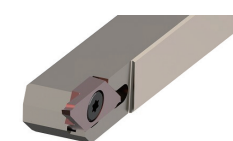
Sleeve holder

Boring bar

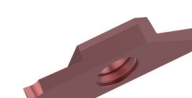
Used in insufficient space of CNC machine



• ASW multifunctional tools for small parts



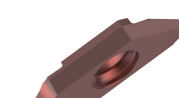
ASW Holder
Multifunctional holder for parting off, back turning and threading, lower cost



ASWP Parting off insert
Various cutting edge designs for different conditions

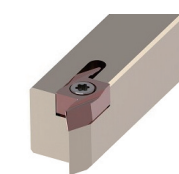


ASWB Back turning insert
Sharp cutting edges, large rake angle for large cutting depth and low cutting force



ASWT Threading insert
Strong cutting edges, large feed, good versatility

• ABF back turning tools for small parts

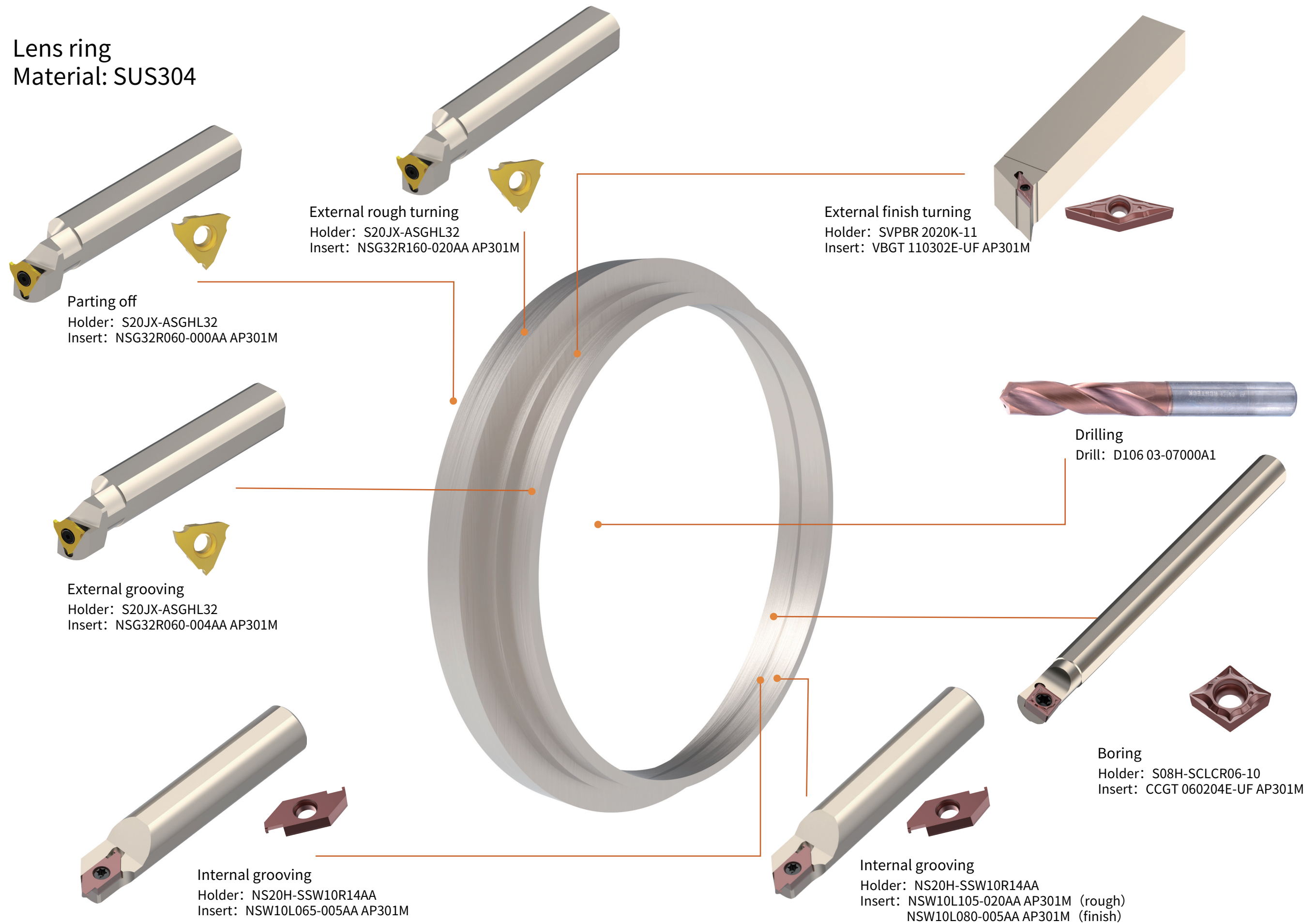


ABF Holder
High precision, special tool for CNC machine

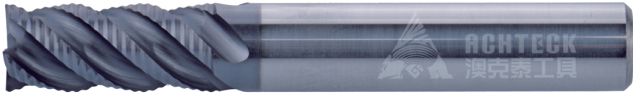


ABF Back turning insert
Sharp cutting edges, fully ground insert, excellent chip removal and control, maximum depth 4mm

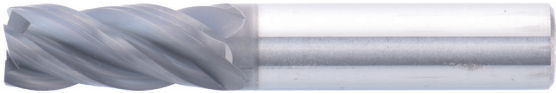
- Lens ring
Material: SUS304



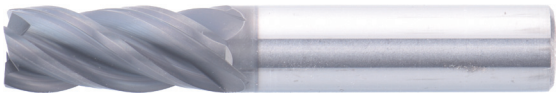
• Watch face housing
Material: SUS316li



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



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



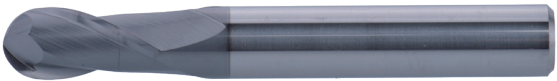
φ2 Root milling
Solid carbide end mill: M200-4ES-020



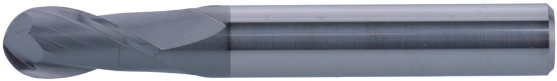
φ3 Drilling
Drill: D106-03-03000A0



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



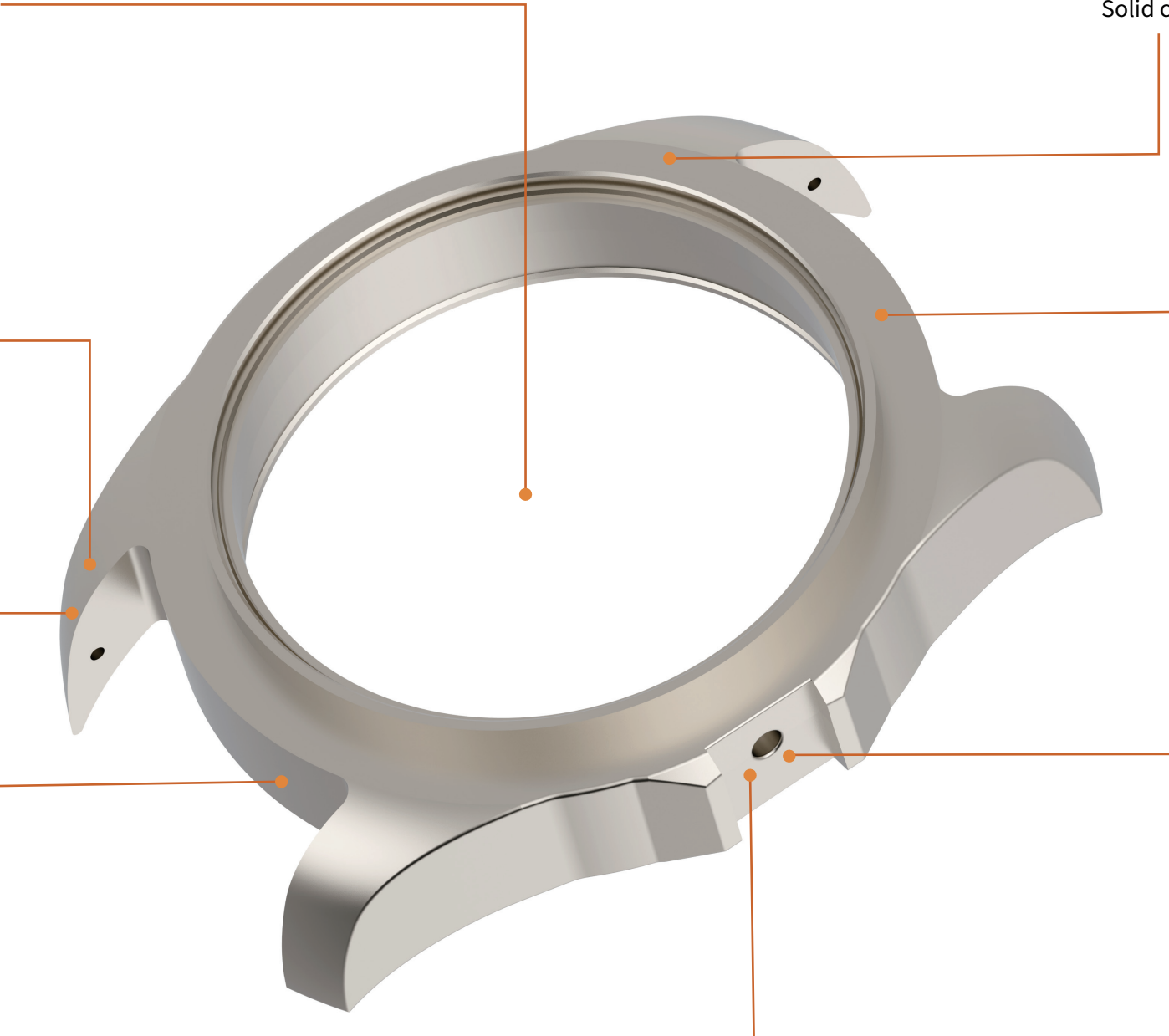
Profile semi-finish milling
Ball-nose mill: M200-2BS-100



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



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



- Watch Bezel
Material: SUS316Li



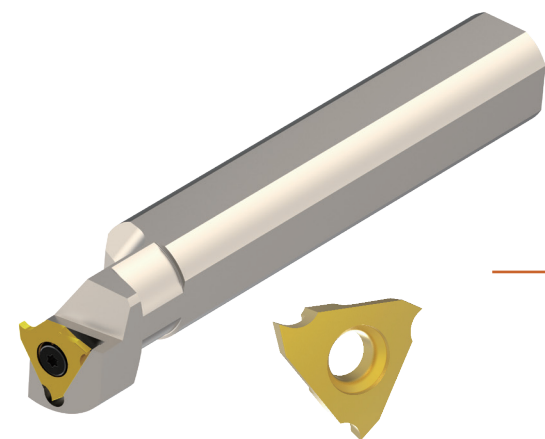
Face finish turning

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



Finish back turning

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



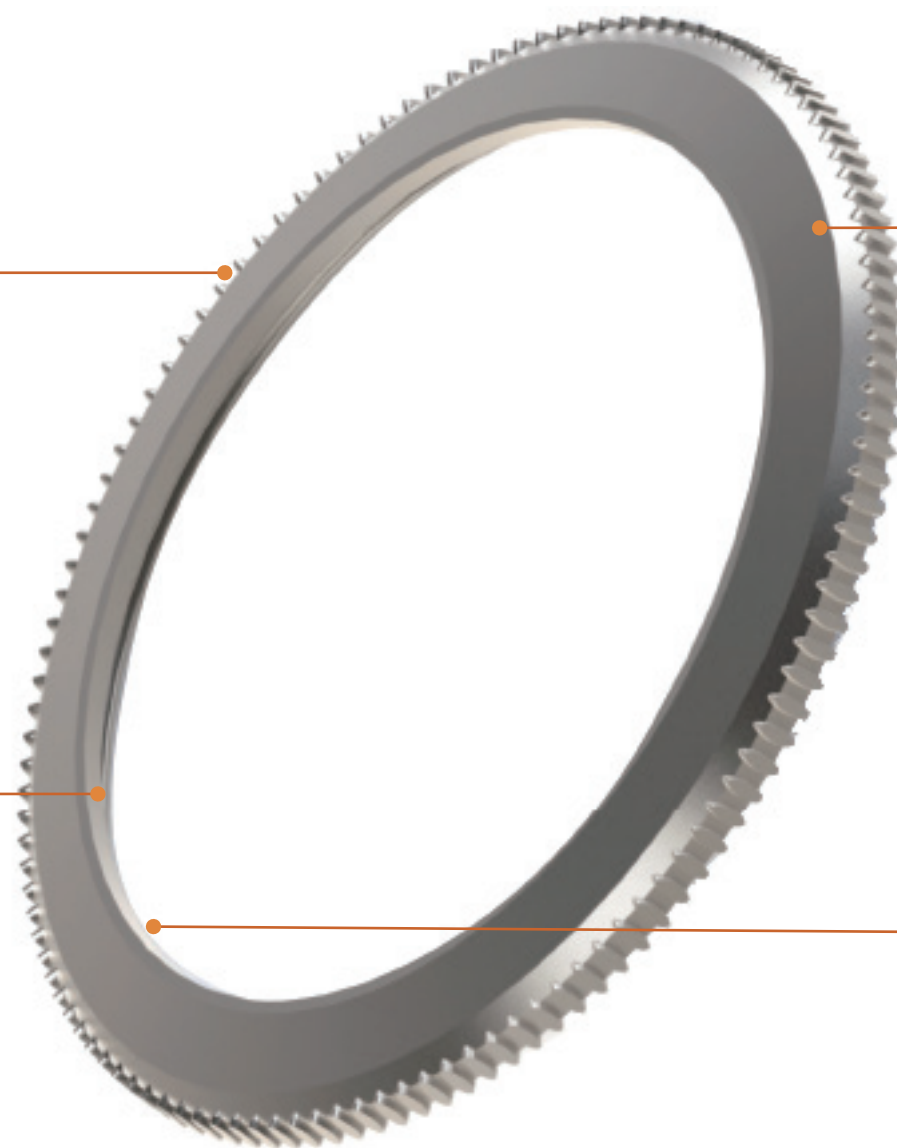
Internal grooving

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

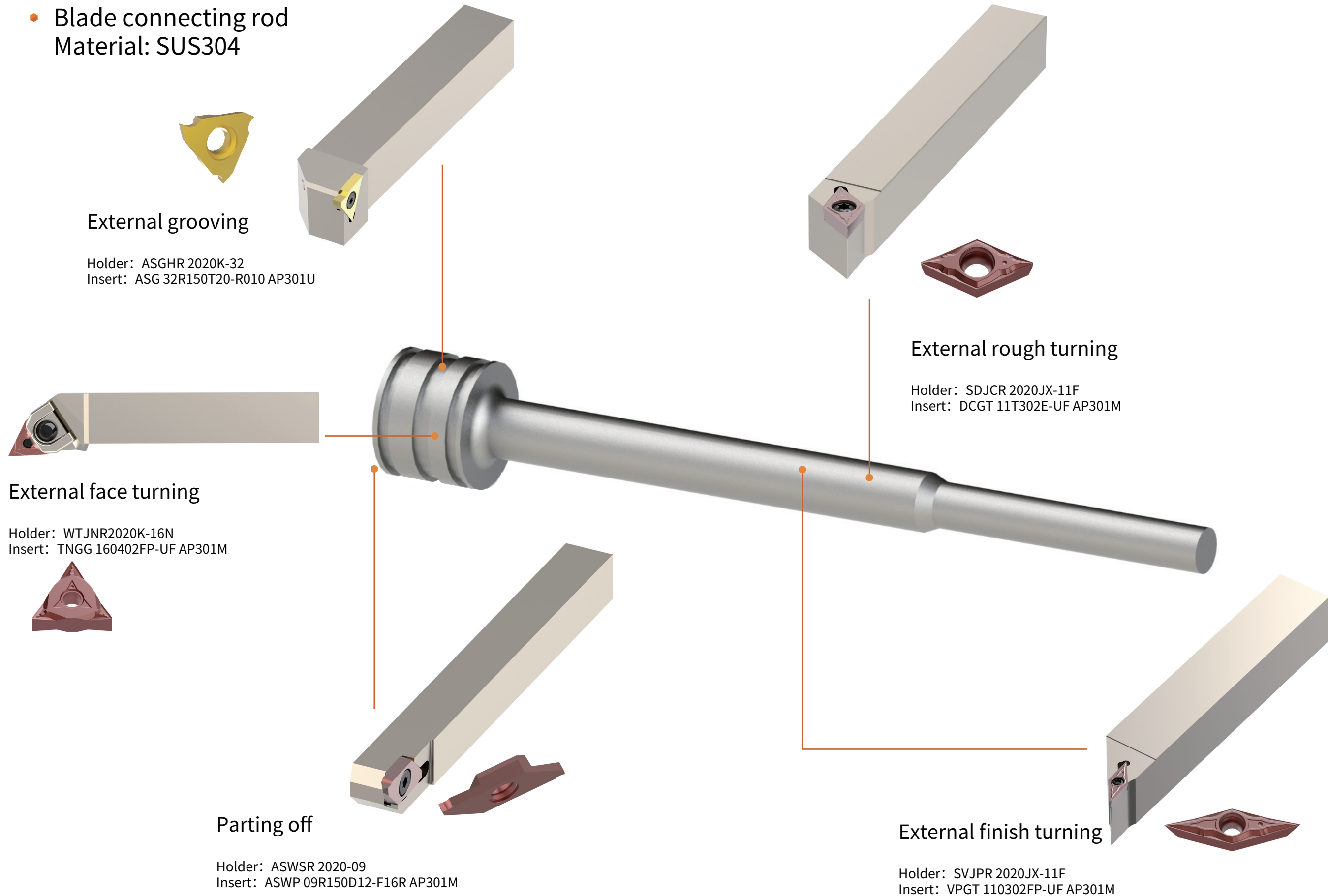


Boring

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



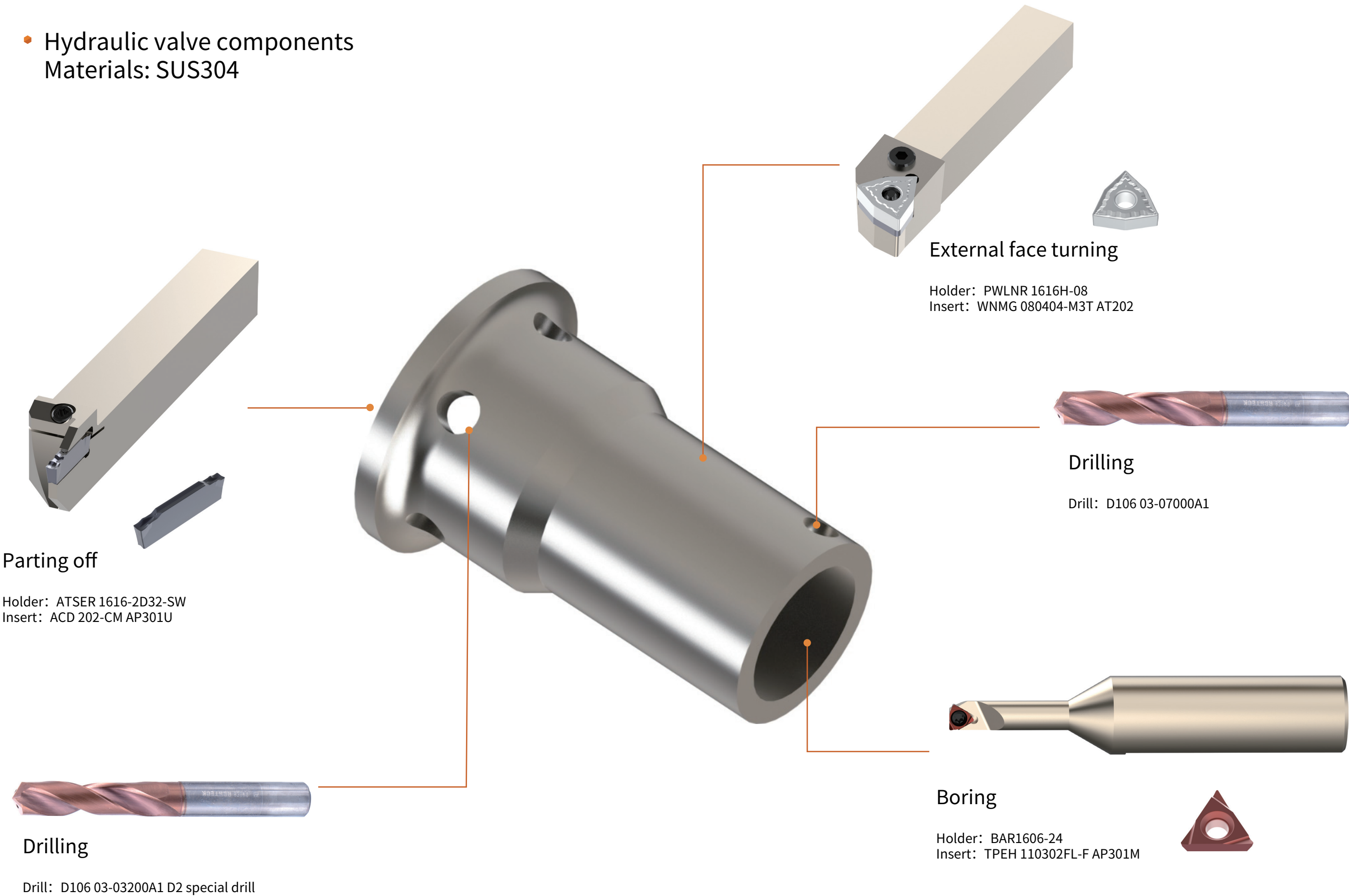
- Blade connecting rod
Material: SUS304



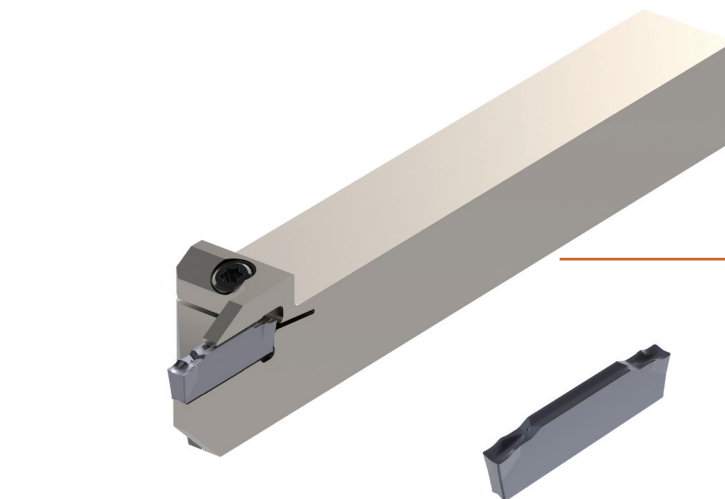
- Sensor component
Material: SUS316li



- Hydraulic valve components
Materials: SUS304

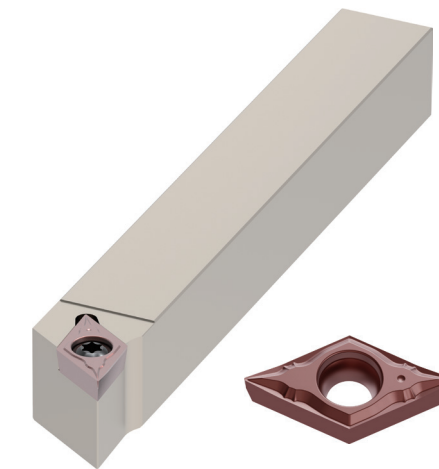


- Industrial lens base
Material: SUS304



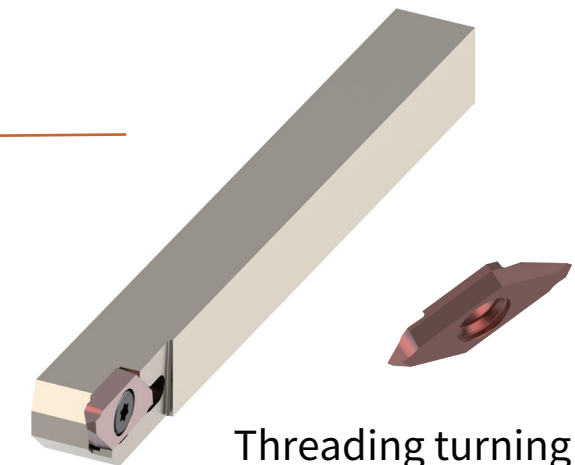
Parting off

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



External face turning

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



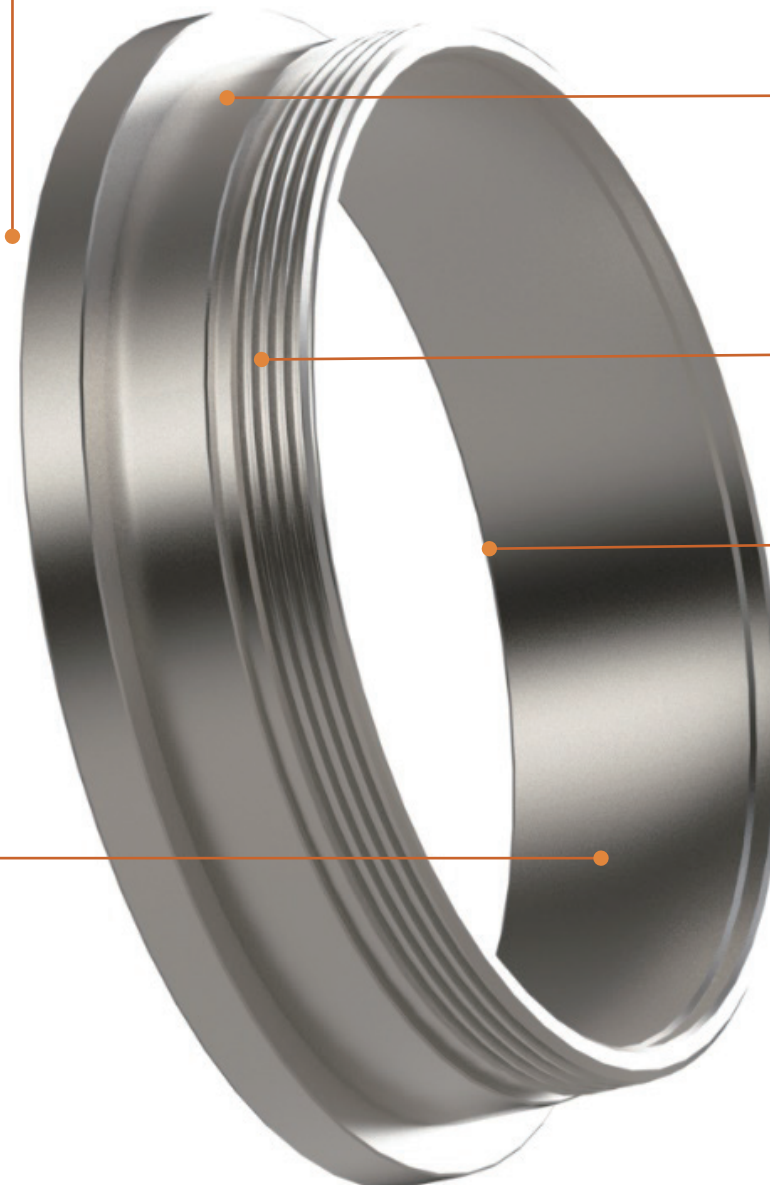
Threading turning

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



Boring

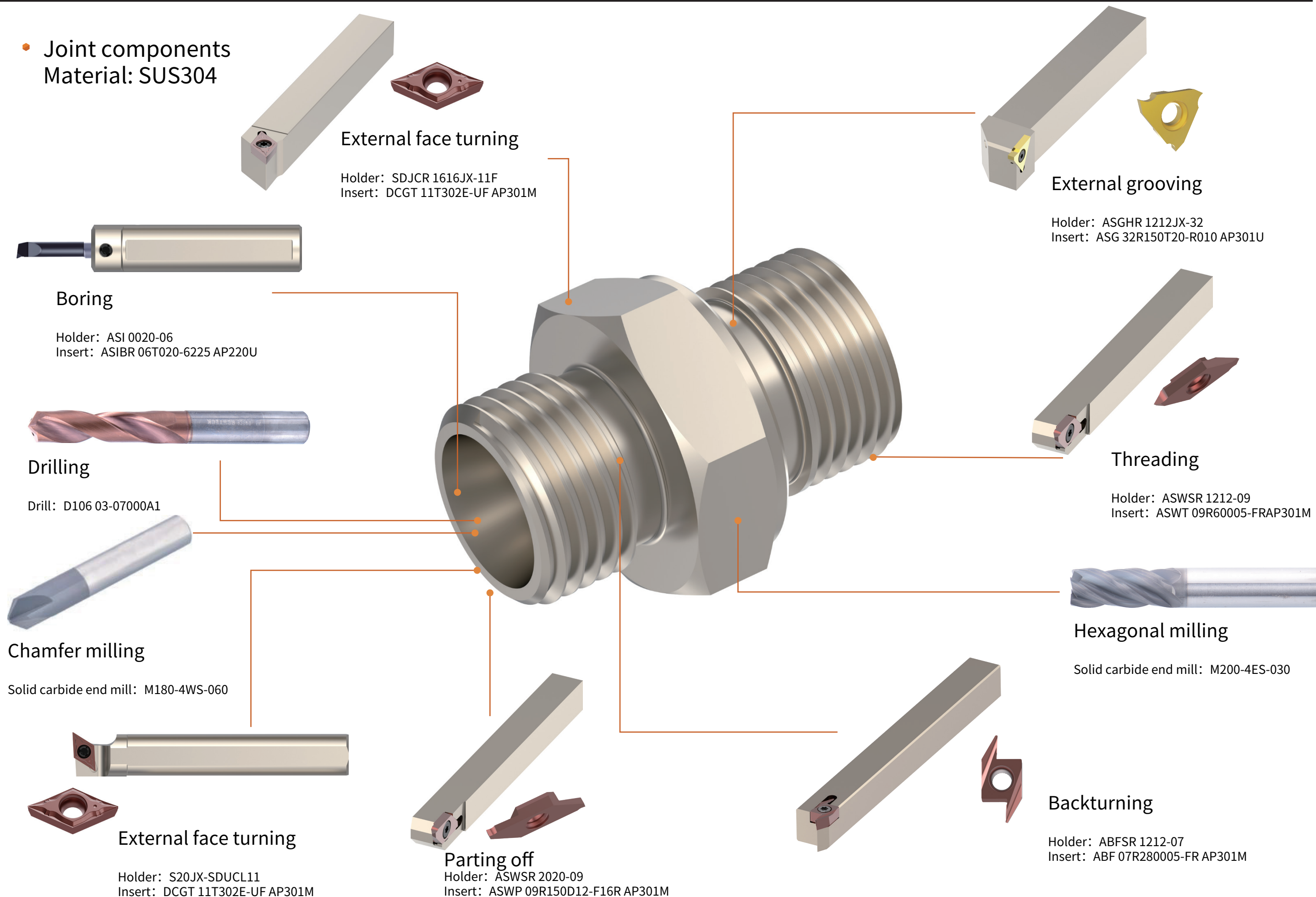
Holder: A12M-SVUCR08-16AE
Insert: NVC08L000-005AA AP301M



Drilling

Drill: D151-03-19000A1

- Joint components
Material: SUS304





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