



// 2024

Aerospace 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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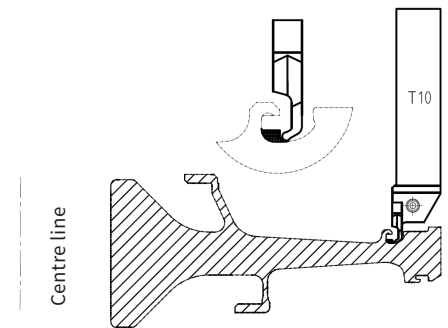
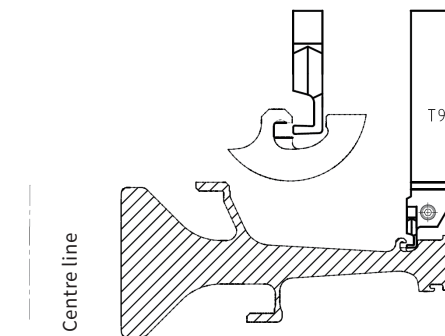
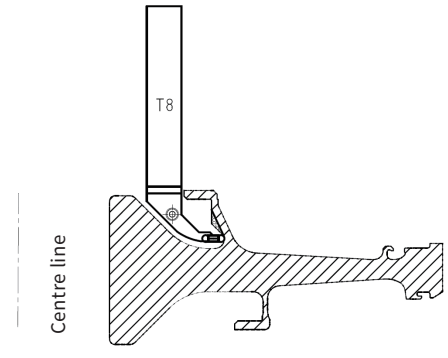
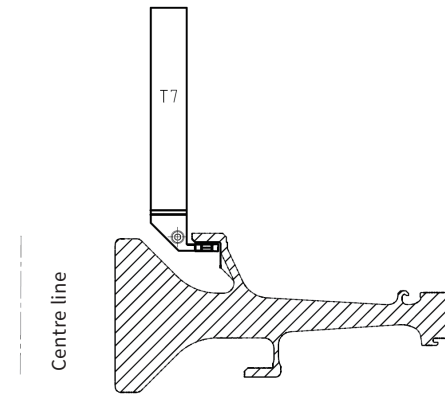
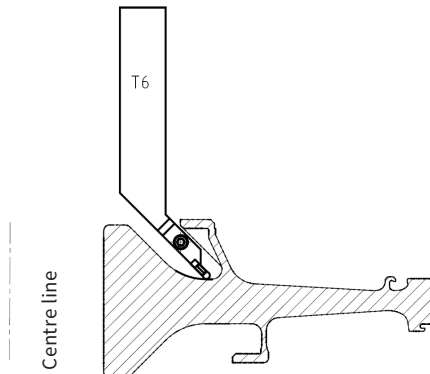
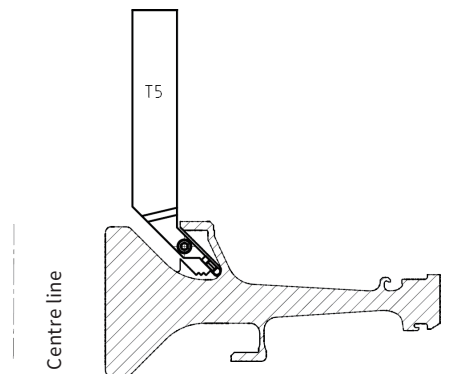
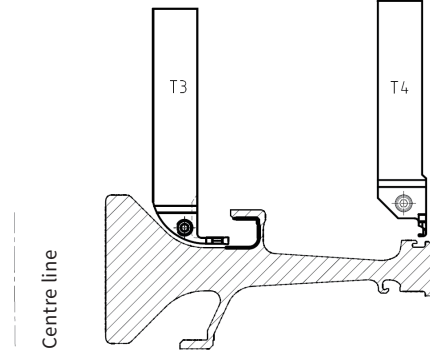
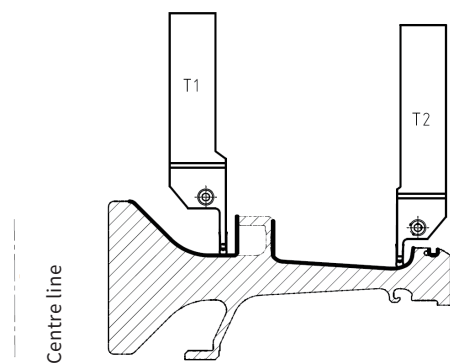
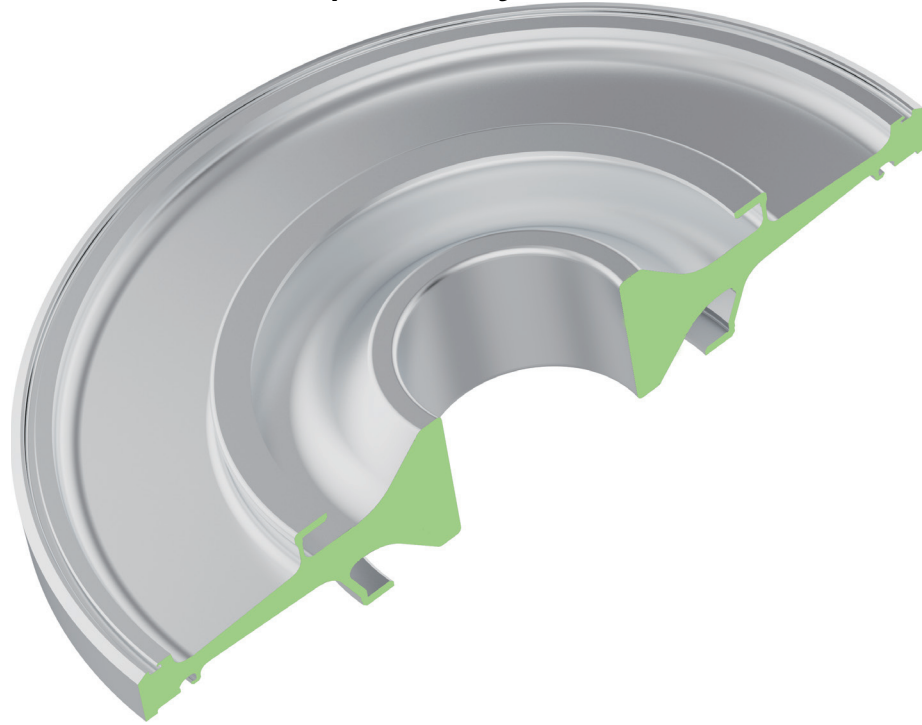
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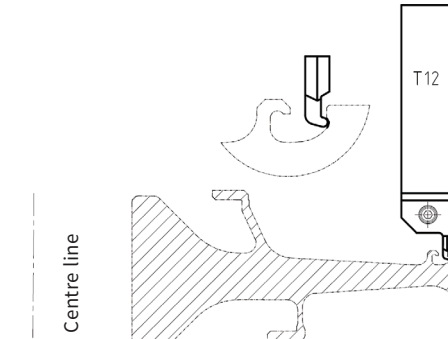
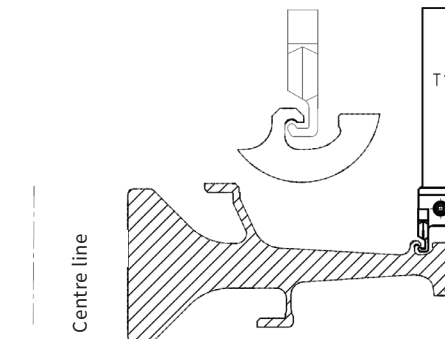
Blade 15-16

- Turbine disc
Material : Powdered super alloy

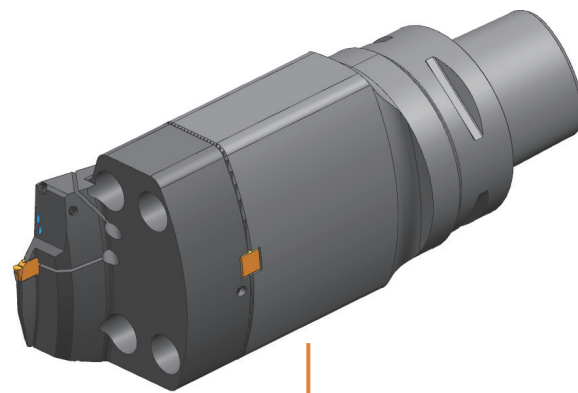


Solutions for high pressure turbine disc and other disc parts

- Achteck has advanced design concepts and difficult special tool production capacity
- Advanced insert substrate and coating for aerospace engine parts and difficult-to-machine materials
- Excellent performance



- Disc and ring parts
Material: Heat resistant alloy



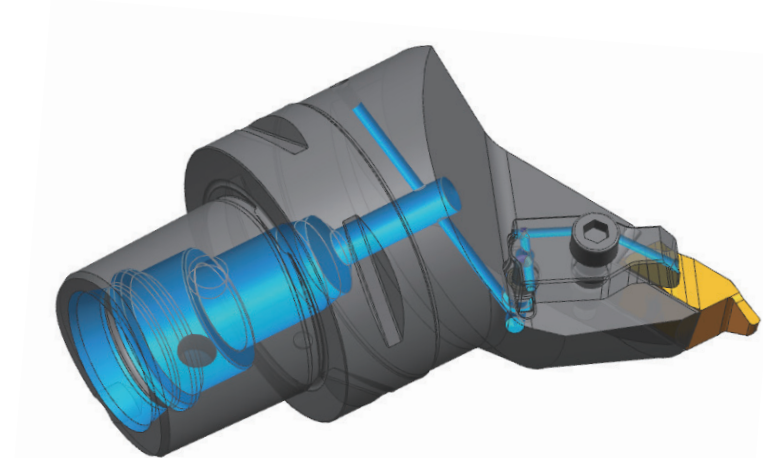
Application: Face turning and grooving disc and ring parts
Solution: Modular face grooving shank with high pressure internal cooling

- The enhanced groove insert for better clamping
- Precision ground insert with good profile
- 1st grade choice AP130S for semi-finishing, finishing



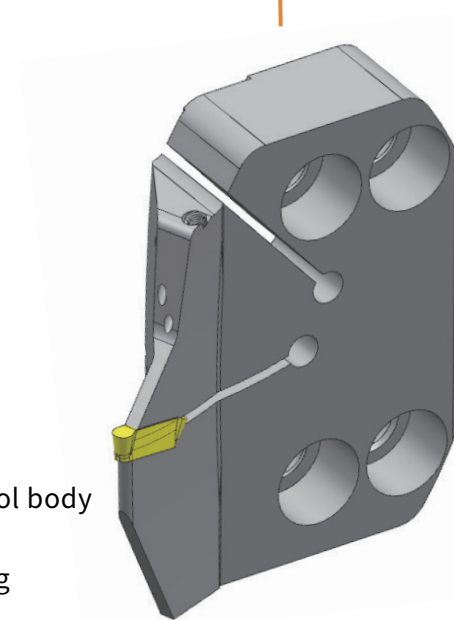
Application: External turning disc and ring parts
Solution: Modular face grooving shank with high pressure internal cooling

- The enhanced grooving insert for better clamping
- High hardness tool to enhance the rigidity of the tool body
- Precision ground insert with good profile
- 1st grade choice AP130S for semi-finishing, finishing



Application: Internal turning and grooving disc and ring parts
Solution: Internal grooving shank with high pressure internal cooling

- Special high rigidity insert for narrow grooving
- Precision ground insert, equipped with high pressure internal cooling plate
- 1st grade choice AP130S for semi-finishing, finishing

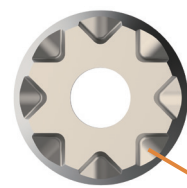


- Landing gear master cylinder
Material: Heat resistant alloy or Titanium alloy



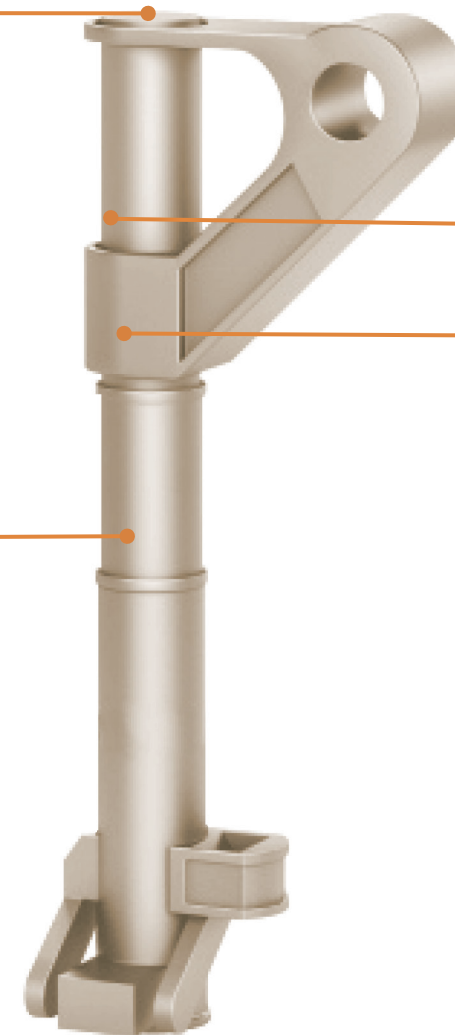
Application: Master cylinder deep hole drilling
Solution: Achtek deep hole drilling series

- Diameter range: D25-D65 mm
- With grade AP403S for difficult-to-machine materials
- The insert grade covers ISO P, M, S materials

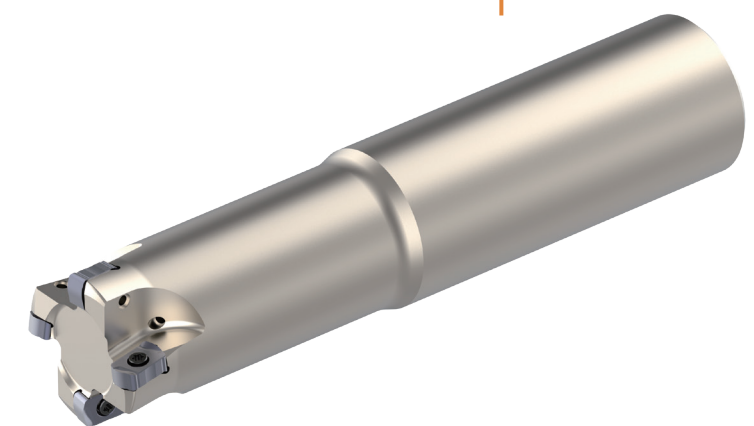


Anti-rotation slot

Application: 5-axis profile milling
Solution: Achtek profile milling cutter APM00-RO10/12/16
➤ Round inserts with anti-rotation slots
➤ With grade AP403M and AP403S for difficult-to-machine materials



Application: Transition round corner rough and semi-finish machining
Solution: Achtek ballnose milling cutter APM00-RPM08/10
➤ The bottom of the insert has an anti-rotation slot to avoid under or over cutting
➤ Universal geometry with spiral cutting edge design provides low cutting forces
➤ Peripheral and center cutting edges



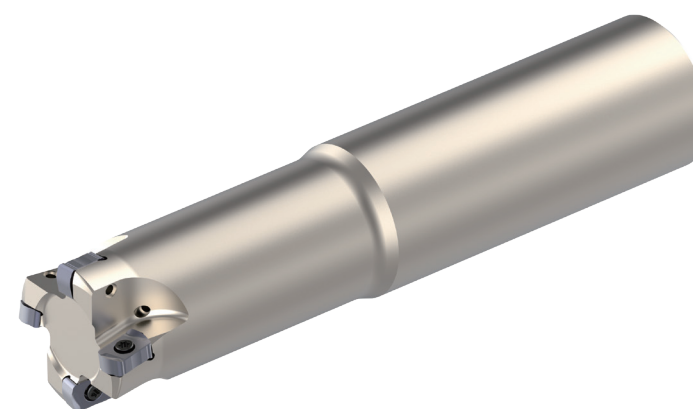
Application: High feed milling or plunge milling
Solution: Achtek high feed milling cutter AHM20-LN06
➤ Approach angle 20°
➤ Negative indexable insert with 4 cutting edges
➤ Rectangle insert design offers secured insert clamping

• Structural part of wings
Material: Titanium alloy/
Aluminium alloy

Application: Milling

Solution: Achtek efficient machining

- High precision dimensions
- Special insert positioning method
- In the face milling and pocket milling of aluminum alloy structural parts, it provides efficient machining solutions



Application: High feed milling pockets, rough milling
Solution: Achtek high feed milling tool AHM20-LN06

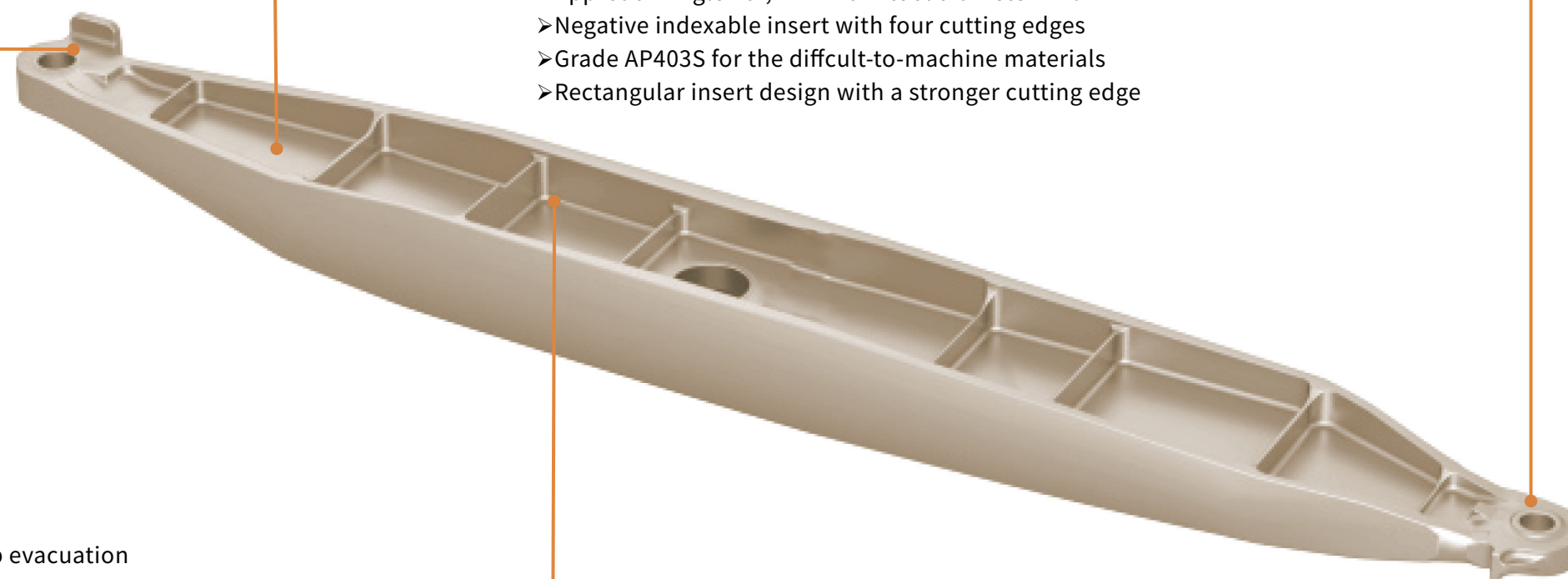
- Approach Angle 20°, minimum tool diameter D16 mm
- Negative indexable insert with four cutting edges
- Grade AP403S for the difficult-to-machine materials
- Rectangular insert design with a stronger cutting edge



Application: Hole drilling

Solution: Achtek short hole drills

- Universal insert is suitable for P, M, S materials
- Hole drilling from 1xD to 3xD
- Double internal coolant holes for good cooling and chip evacuation



Application: Slot milling
Solution: Achtek solid carbide end mill M150 series

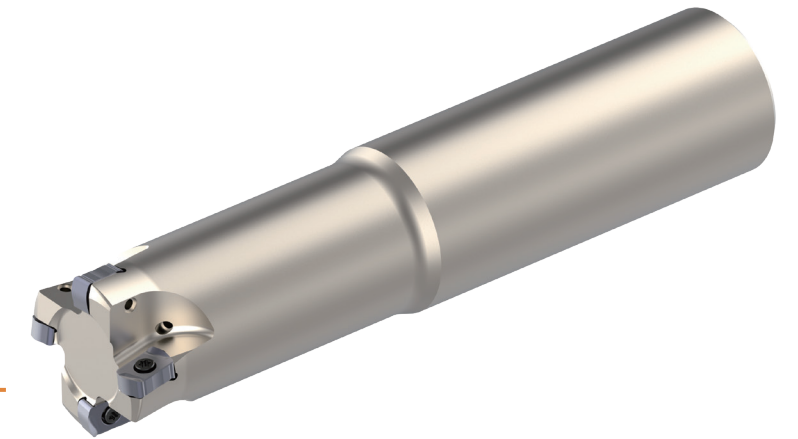
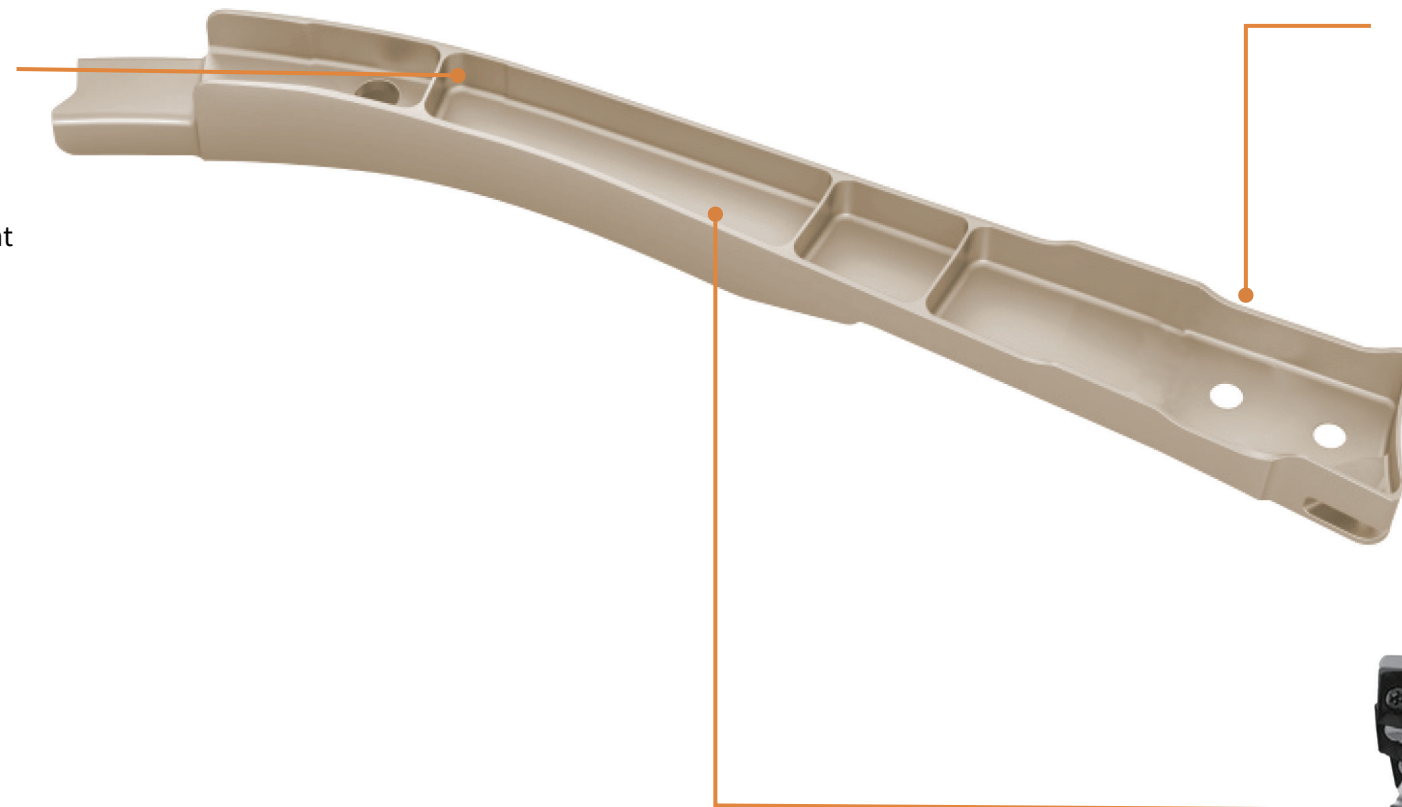
- New substrate grade AK12E with excellent impact resistance and heat resistance
- Differential pitch and profile design, effectively eliminate the vibration, with excellent chip removal

- Flap guide rail
Material: Titanium alloy, stainless steel



Application: Drilling
Solution: Solid carbide drill D151 series with internal coolant

- Sharp edge to ensure efficient drilling
- The contour design and polishing technology for the chip flute, ensure smooth chip removal



Application: High feed milling pockets, rough milling
Solution: Achteck high feed milling tool AHM20-LN06

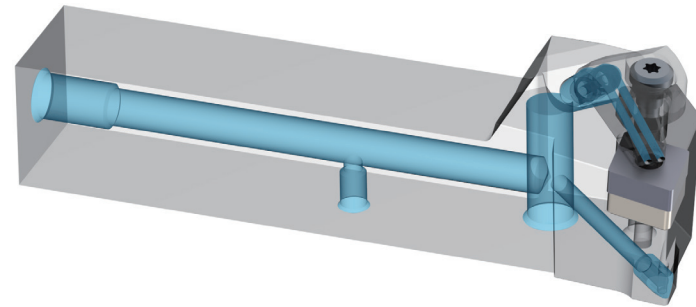
- Approach Angle 20°, minimum tool diameter D16 mm
- Negative indexable insert with four cutting edges
- Rectangular insert design with a stronger cutting edge
- Grade AP403S for the difficult-to-machine materials



Application: Pocket rough machining
Solution: Achteck porcupine milling tool APE90-LN09/LN13
Multi-tooth porcupine milling

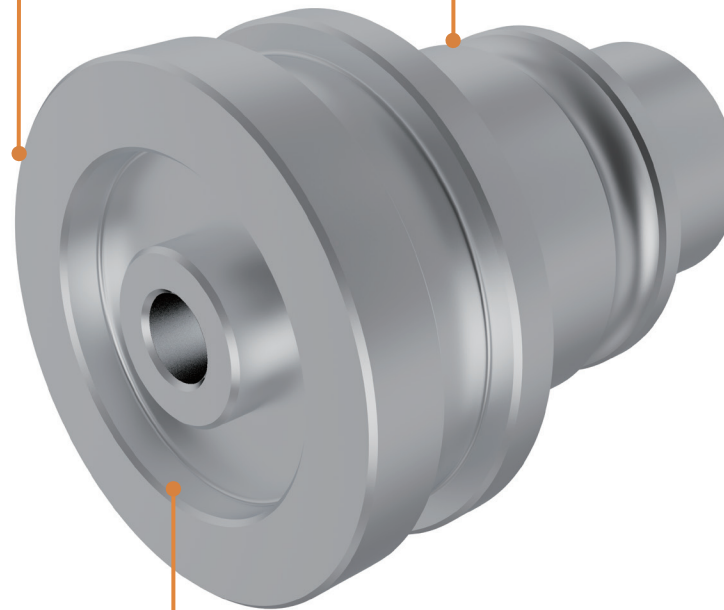
- Accurate internal coolant towards each insert
- Tangential insert design provides a stronger and more reliable cutting edge
- Grade AP403S for the difficult-to-machine materials

- Shaft turning
Material: Titanium alloy or stainless steel



Application: ISO external turning, face turning and internal turning
Solution: Achteck ISO turning holder series

- Including Positive and Negative inserts: C, D, W, V, T, R, S etc.
- Various chip breaker designs for ISO P, M, S materials
- A high-pressure internal coolant tool holder is available for the most difficult-to-machine materials



Application: External grooving
Solution: Achteck external grooving series

- V-shaped positioning design at the bottom of insert provides reliable clamping
- The tool holder used high strength alloy steel, with long tool life
- High pressure internal coolant tool holder is available for the most difficult-to-machine materials



Application: Face grooving
Solution: Achteck face grooving series

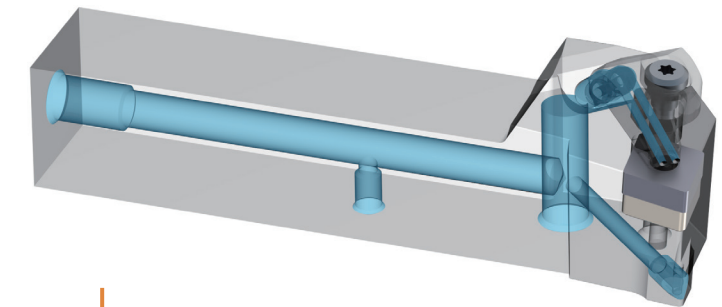
- V-shaped positioning design at the bottom of insert provides reliable clamping
- The high strength alloy steel tool holder, with long durability
- High pressure internal coolant tool holder is available for the most difficult to machine materials

- Aeroengine case
Material: Titanium alloy or Heat resistant alloy



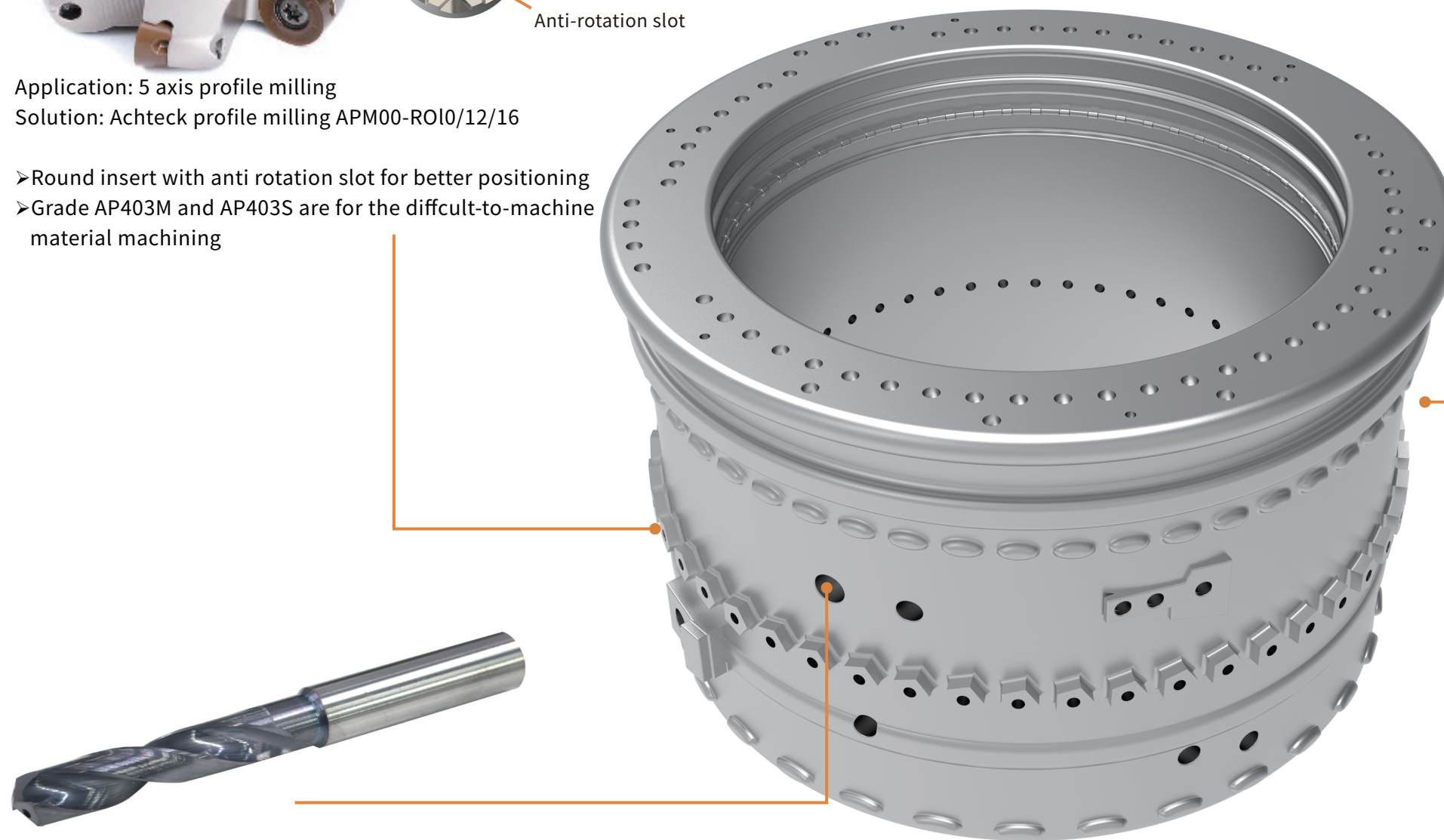
Application: 5 axis profile milling
Solution: Achteck profile milling APM00-ROI0/12/16

- Round insert with anti rotation slot for better positioning
- Grade AP403M and AP403S are for the difficult-to-machine material machining



Application: ISO turning products
Solution: PVD coating turning grade-AP100S

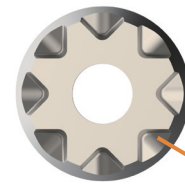
- Nano PVD coating with high hardness provides superior performance for heat resistant alloys and stainless steel
- Smooth coating surface reduces cutting forces, and improves wear resistance



Application: Drilling
Solution: Achteck solid carbide drill D151 series with internal coolant

- Sharp cutting edge ensures efficient drilling
- The profile design and polishing technology of the chip flute ensures smooth chip removal

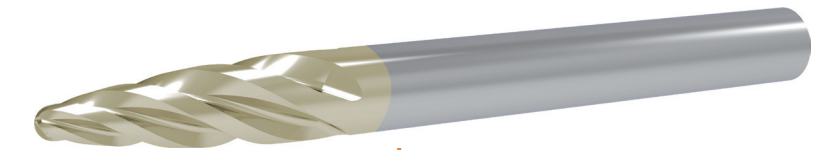
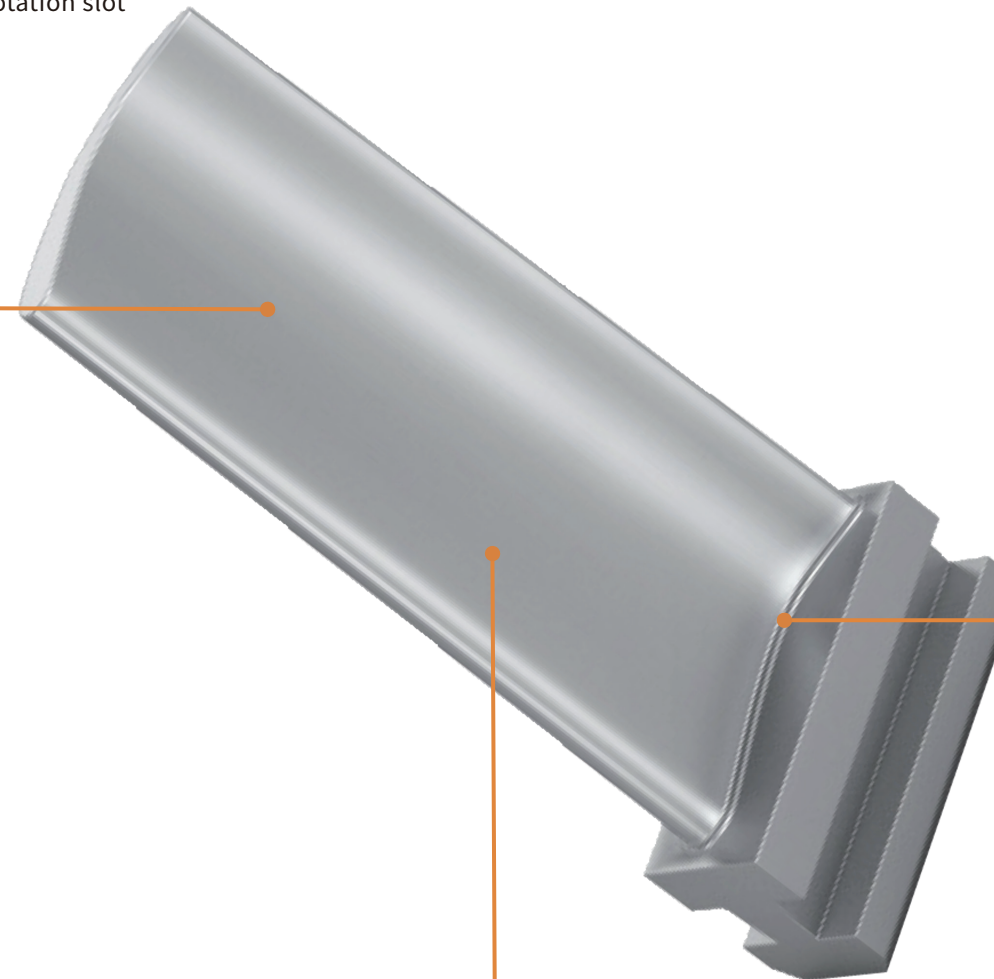
- Blade
Material: Heat resistant alloy /Stainless steel/Titanium alloy



Anti-rotation slot

Application: 5 axis profile milling
Solution: Achteck profile milling APM00-RO10/12/16

- Round insert with anti-rotation slot for better positioning
- Grade AP403S and AP403M are for difficult-to-machine material



Application: Semi-finishing/finishing on blade transitional area
Solution: Achteck special solid carbide end mill



Application: Airfoil semi-finishing milling
Solution: Achteck solid carbide end mills

- PVD coating with high hardness and good oxidation resistance
- Achteck self-developed high strength carbide rods