



// 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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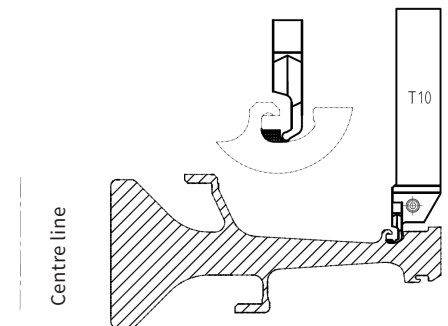
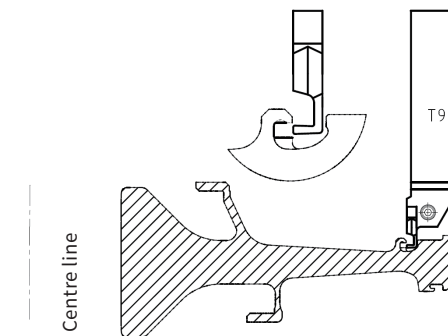
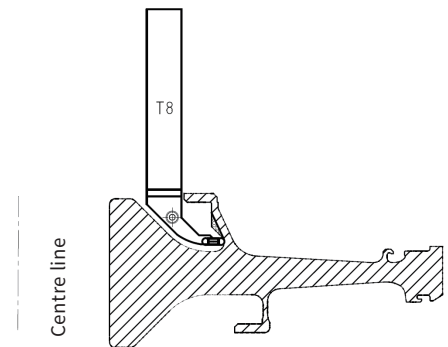
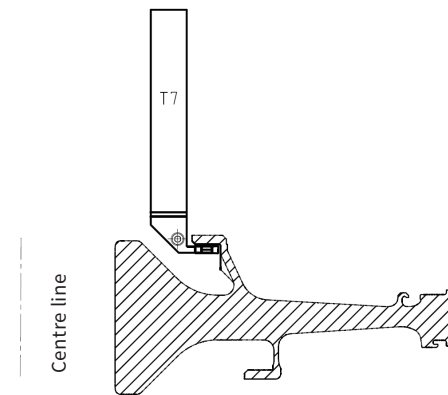
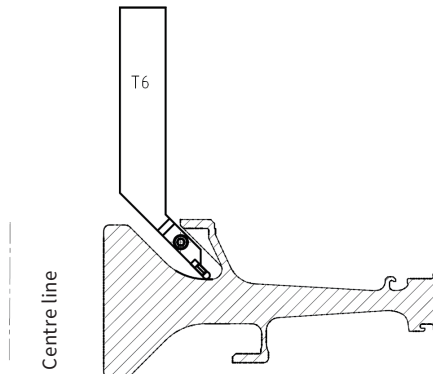
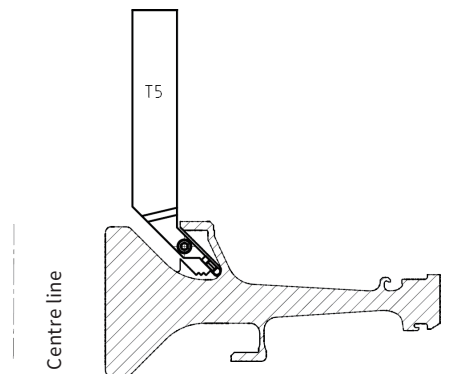
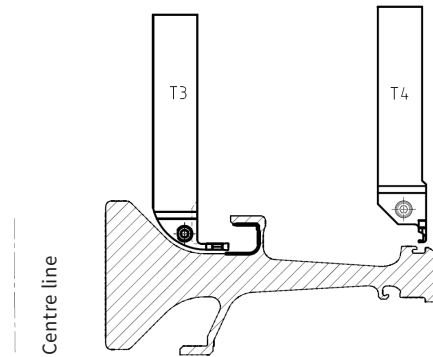
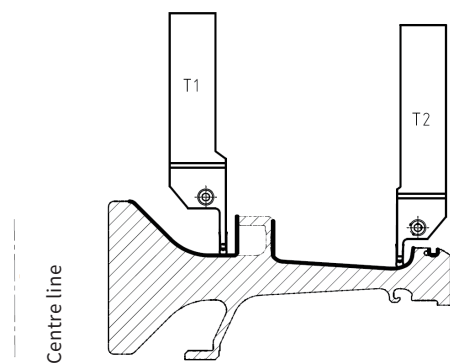
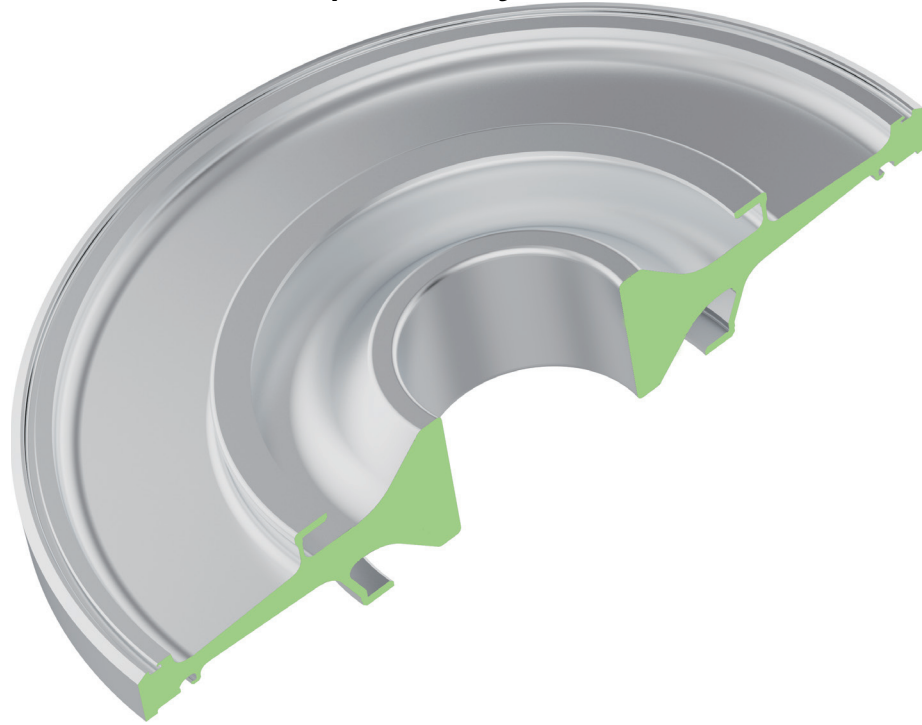
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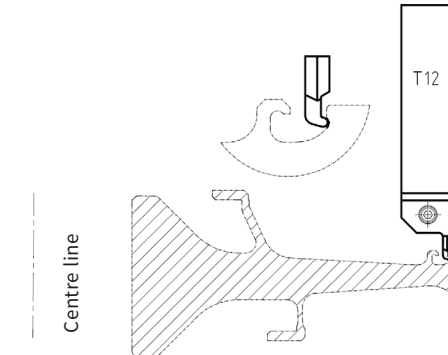
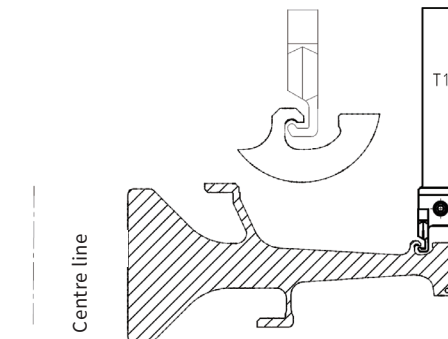
Blade ..... 15-16

- Turbine disc  
Material : Powdered super alloy



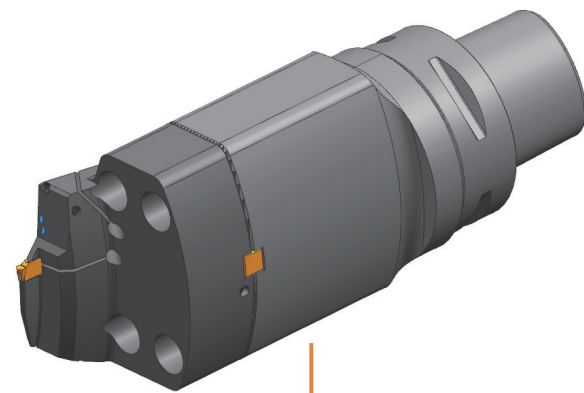
#### Solutions for high pressure turbine disc and other disc parts

- Achteck has advanced design concepts and professional 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



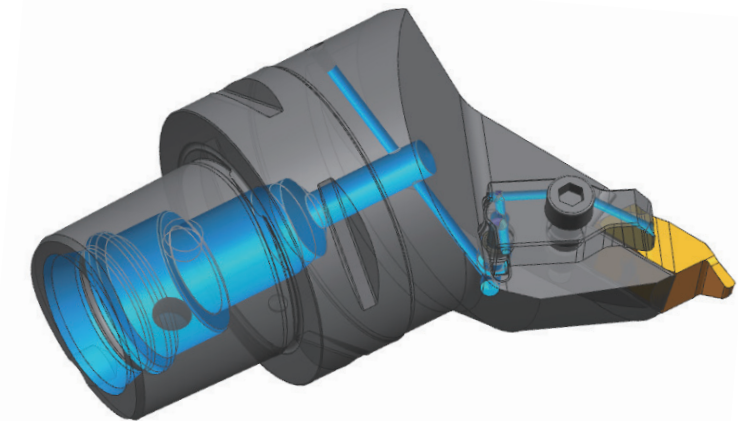
Application: Face turning and grooving disc and ring parts  
Solution: Modular face grooving shank with high pressure internal cooling

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



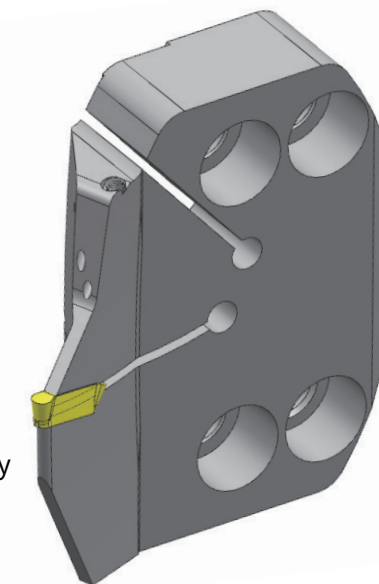
Application: Internal turning and grooving disc and ring parts  
Solution: Internal grooving shank with high pressure internal cooling

- 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



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

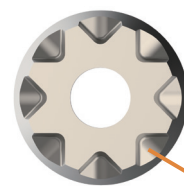


- Landing gear master cylinder  
Material: Heat resistant alloy or Titanium alloy



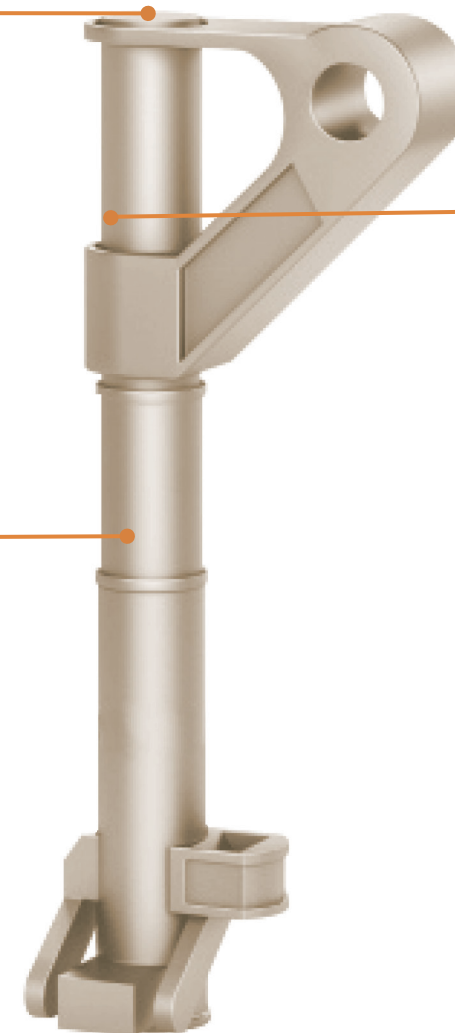
Application: Master cylinder deep hole drilling  
Solution: Achteck deep hole drilling series

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

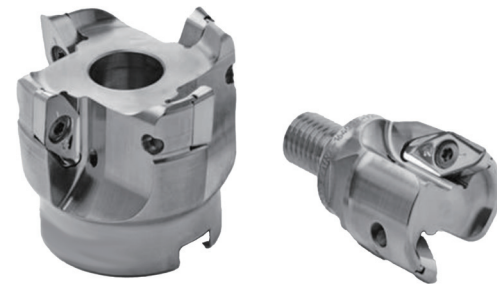


Application: Transition round corner rough and semi-finish machining  
Solution: Achteck ballnose milling cutter APM00-RPM08/10  
➤ The bottom of the insert has an anti-rotation slot to avoid under or over cutting  
➤ Universal geometry with spiral cutting edge design provides low cutting forces  
➤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

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

Application: Milling  
Solution: Achteck 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



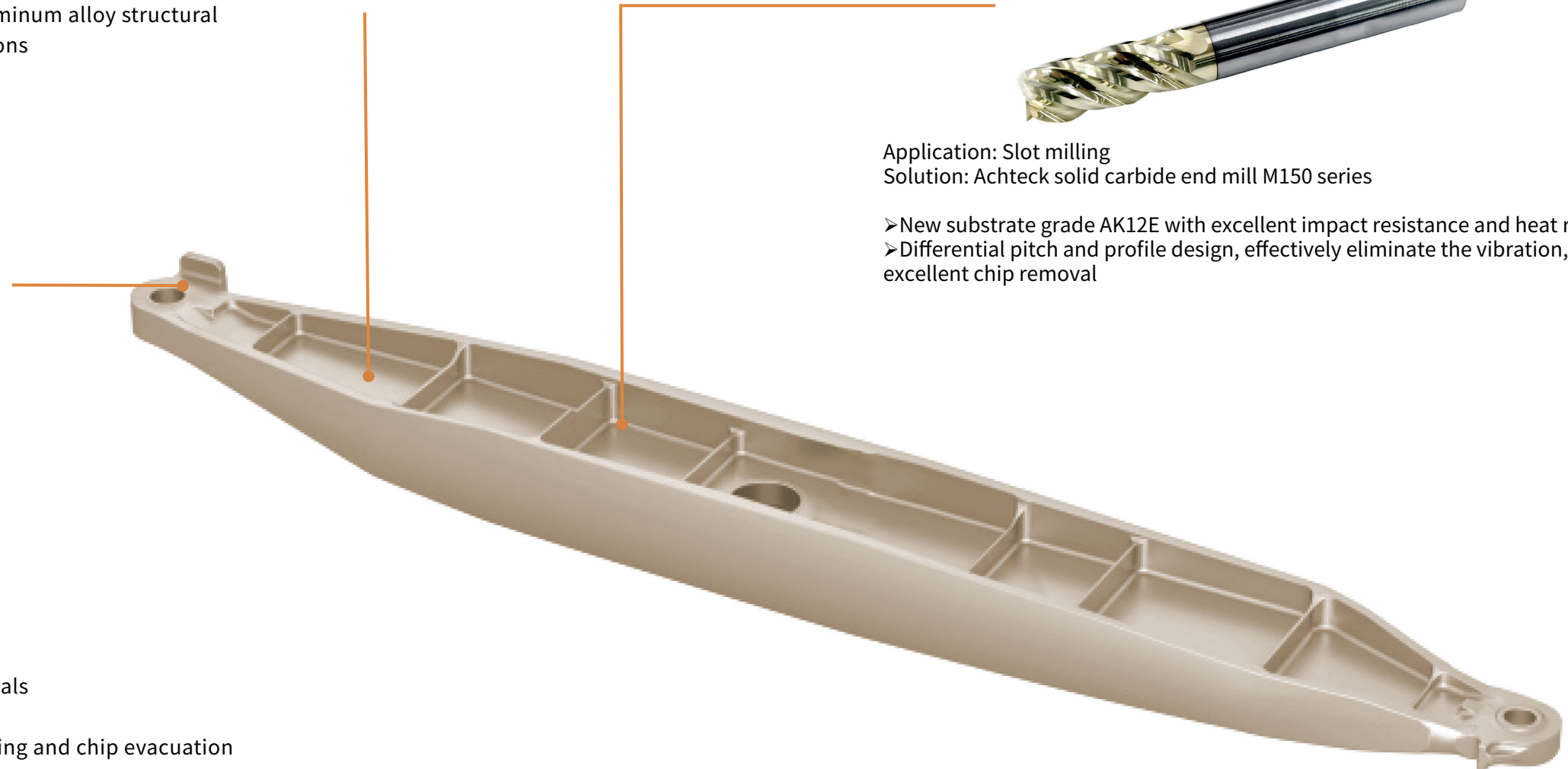
Application: Hole drilling  
Solution: Achteck short hole drills

- 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: Achteck 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

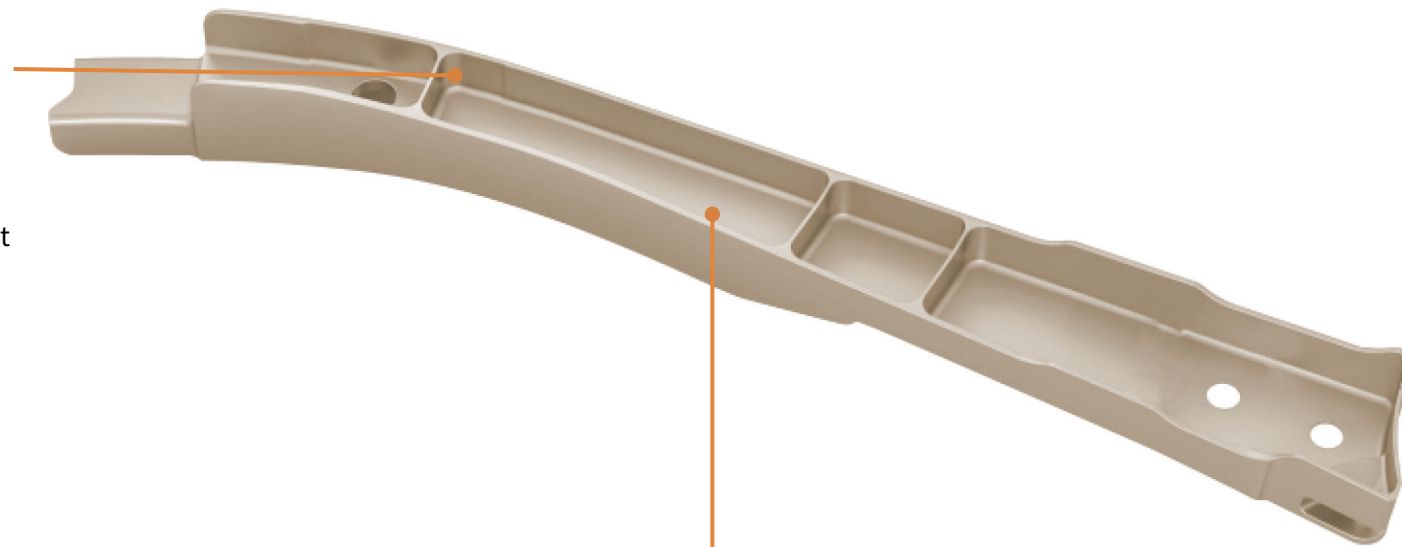


- Flap guide rail  
Material: Titanium alloy, stainless steel



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

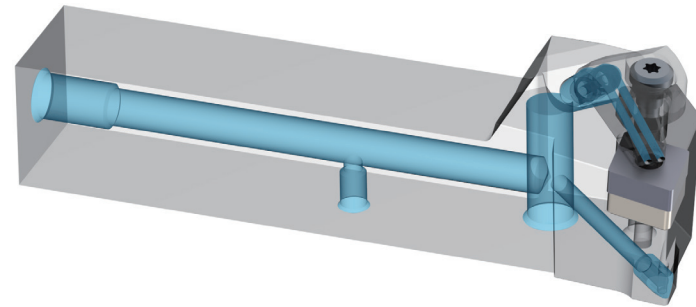


Application: Pocket rough machining  
Solution: Achtek porcupine milling tool APE90-LN09/LN13/AO12  
Multi-tooth porcupine milling

- 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

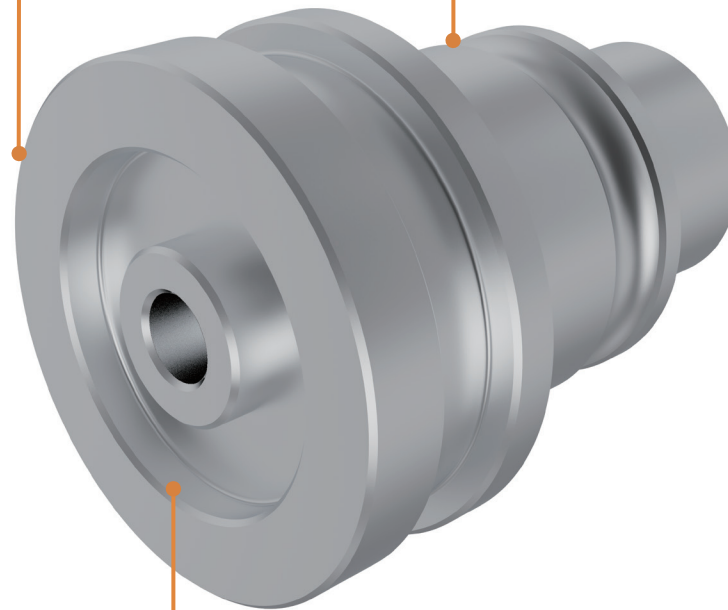


- Shaft turning  
Material: Titanium alloy or stainless steel



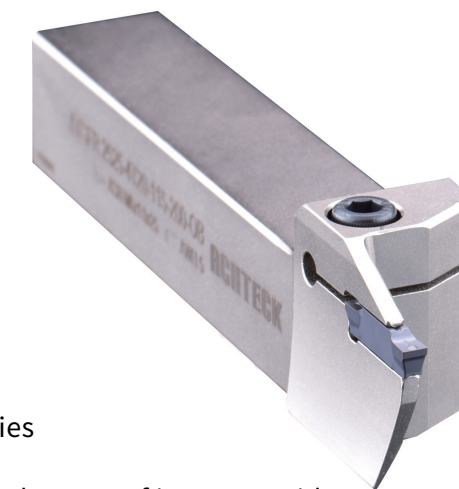
Application: ISO external turning, face turning and internal turning  
Solution: Achteck ISO turning holder series

- 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

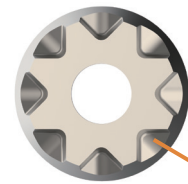


Application: Face grooving  
Solution: Achteck face grooving series

- 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



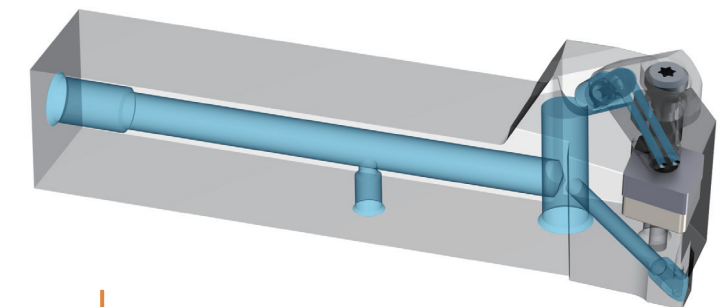
- Aeroengine case  
Material: Titanium alloy or Heat resistant alloy



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 AP403M and AP403S are for the difficult-to-machine material machining



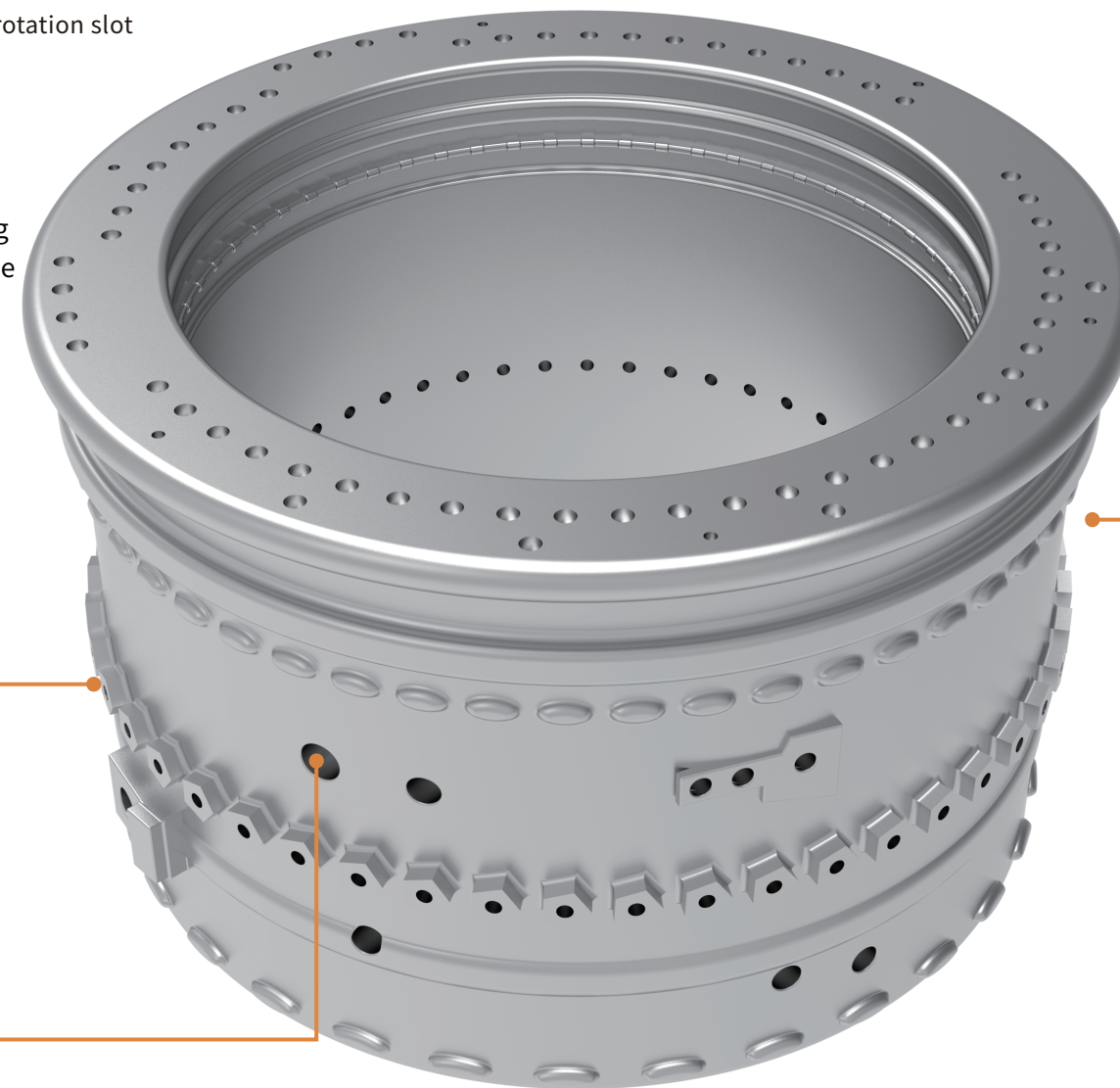
Application: ISO turning products  
Solution: PVD coating turning grade-AP100S

- 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

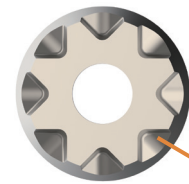


Application: Drilling  
Solution: Achteck solid carbide drill D151 series with internal coolant

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



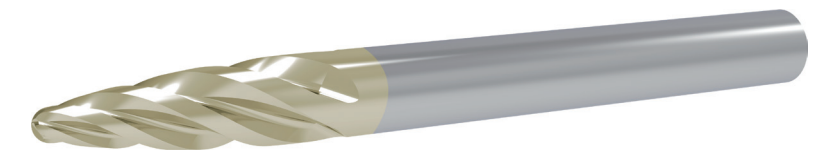
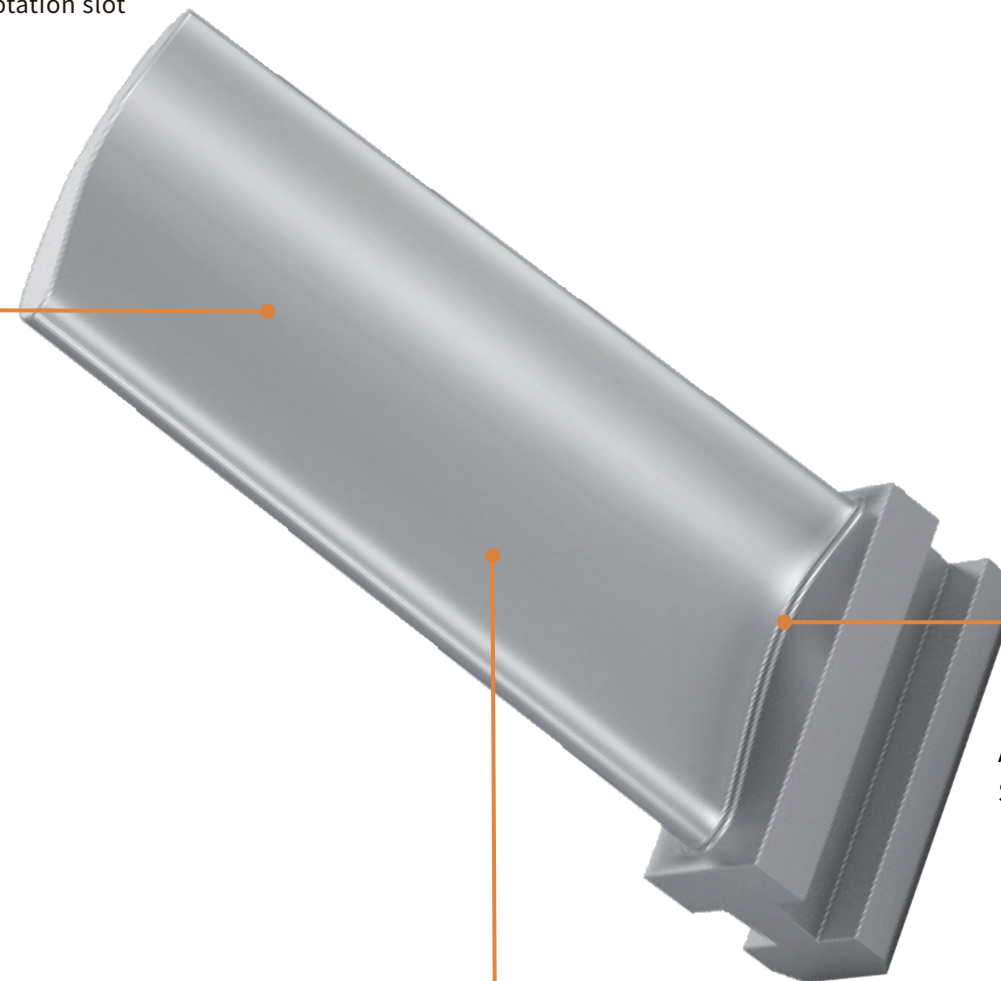
- Blade  
Material: Heat resistant alloy /Stainless steel/Titanium alloy



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