Certified processes.

Testing of mechanical and technological properties

- Metallographic testing
- Determination of chemical composition
- Geometry and surface roughness tests
- Linearity and torsion tests
- Refinement of heat treatments, determination of tempering temperatures
- Non-destructive test procedures
- Positive material identification

Certified according to international standards ISO

Satisfied.

Group headquarters
Subsidiaries & local offices
Plants
ZOLLERN is one of the pioneers of the metal industry. 3,000 employees at 15 production locations and seven subsidiaries in Europe, North and South America and Asia develop, manufacture and supervise a range of innovative metal products. ZOLLERN supplies sophisticated solutions for diverse applications through its business units drive technology, plain bearing technology, foundry technology, mechanical engineering elements and steel profiles.

ZOLLERN – Foundry Technology – Investment Castings produces extremely hard-wearing precision investment casting products with almost limitless design possibilities in Laucherthal, Germany, as well as at other company sites in Soest, Slovenia, Romania and Portugal. ZOLLERN products include high-performance turbine blades for gas turbines, for example. Our in-house manufacturing capacity ranges from the master melt through to ready-to-install investment casting parts including all finishing. The experienced specialists at ZOLLERN cast virtually all standardised alloys. We are also able to produce non-standardised special alloys to customer specifications.

ZOLLERN – Foundry Technology Metals was founded in 1708. This is the oldest business unit within the ZOLLERN group. At our factory in Laucherthal, Germany, we manufacture components in copper, copper alloy and high and low alloy steel using sand casting, ceramic casting and centrifugal casting. Our components are characterised by quality materials, precision processing and outstanding surface properties; they are cast from a selection of over 500 alloys and are used in the energy generation industry amongst others.

ZOLLERN – Plain Bearing Technology produces industrial plain bearings at our factories in Braunschweig and Osterode, Germany, including for use in turbines. Thick-walled radial and radial/axial plain bearings as well as radial and axial tilting pad bearings in particular are used in power conversion equipment. ZOLLERN plain bearings are able to take high static and dynamic loads and their reliable performance and long service life in a wide range of designs and applications make them the convincing choice.
Sophisticated components for industrial gas turbines, steam turbines, aero-derivatives.

ZOLLERN – Foundry Technology – Investment Castings finishing. The experienced specialists at ZOLLERN cast non-standardised special alloys to customer specifications.

- **Bearing**
  - Thrust
  - Tilting Pad Bearing

- **Combustion**
  - Pre-swirler
  - Latches
  - Fittings
  - Brackets

- **Journal**
  - Tilting PAD Bearing

- **Burners**
  - Swirler
  - Nozzle
  - Intake
  - Injector
  - Outflow
  - Valves

- **Turbine**
  - Vanes
  - Blades
  - Heat Shields
  - Balancer

Product Samples IGT GT 8000H

Product Samples div.
Aero-derivatives/Engines

Sophisticated components for industrial gas turbines, steam turbines aero-derivatives...

ZOLLERN – Foundry Technology – Investment Castings finishing. The experienced specialists at ZOLLERN cast non-standardised special alloys to customer specifications.

Technology Metals

Industrial Gas Turbines

Burners

Outflow

Combustion

Aero-derivatives/Engines

• Fan

High Pressure Compressor

• Tube Elbow
• Fittings
• Fixtures
• Collars

Low Pressure Turbine

• LP Blades
• LP Vanes
• LP Heat Shields
• Seal Segments
• Liner Segments
• NGV Castings
• Body Valves
• Selectors / Damper
• LP Fuel Pumps

High Pressure Turbine

• HP Blades
• HP Vanes
• HP Heat Shields
• HP Fuel Pumps

Low Pressure Compressor
Certified processes.
First-class quality.

ZOLLERN uses a wide range of methods and instruments to ensure product quality. Material tests are certified according to DIN EN 10204 and conducted throughout the entire manufacturing process.

**Testing of mechanical and technological properties**
- Tensile testing machines
- Hardness testers for all standards
- Fully automatic low-load hardness testers
- Notched-bar impact testing

**Metallographic testing**
- Laboratory for sample preparation, e.g. hot mounting and specimen preparation
- Various macrosopes and microscopes allow precise material analysis

**Determination of chemical composition**
- Spectral analysis
- Chemical analysis

**Geometry and surface roughness tests**
- Measuring machines – optical, tactile and digital
- Roughness measuring devices

**Linearity and torsion tests**
- Measuring tables, measuring bridges of various lengths and angle measuring devices

**Refinement of heat treatments, determination of tempering temperatures**
- Laboratory furnaces

**Non-destructive test procedures**
- Crack detection tests based on the eddy current and magnetic powder principles
- Ultrasonic tests
- Positive material identification
Certified processes.
Certified according to DIN EN 10204 and conducted
Testing of mechanical and
technological properties
Metallographic testing
Determination of chemical composition
Geometry and surface roughness tests
Linearity and torsion tests
Refinement of heat treatments, deter-
mination of tempering temperatures
Non-destructive test procedures
Positive material identification
Certified according to the international standards ISO
Certified environmental and energy management
satisfied.

Group headquarters
Subsidiaries & local offices
Plants