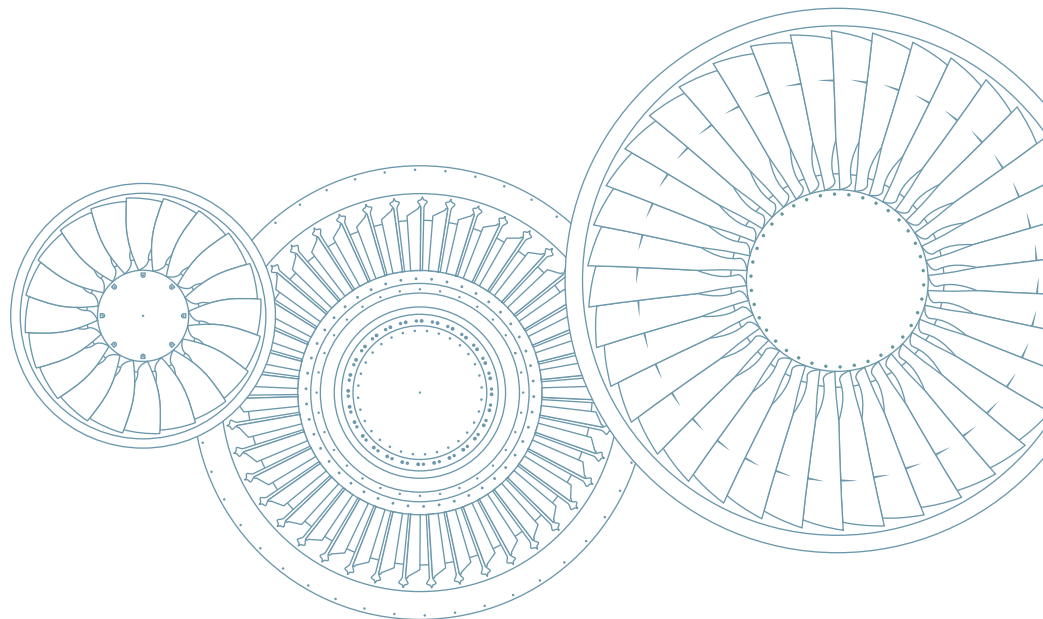


We improve your products



## We improve your products

Being a brand of MTU Aero Engines, MTU Aero Solutions can draw on nearly 100 years of aircraft engine background. MTU is Germany's leading engine manufacturer and ranks among the global players in the industry.

In the engineering domain, our specialists command unique expertise and competencies. We are able to develop top-notch technical applications for you. MTU Aero Solutions pools the know-how of all areas and provides you with one-stop solutions. Our innovative engineering and development processes make sure we deliver products and services complying with the most stringent, aviation industry standards.

Whatever your particular challenges may be, we're your partner.

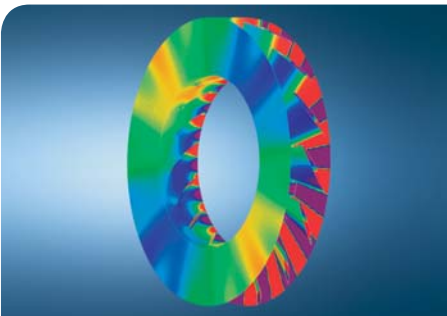
### MTU's range of engineering services

Compressor and turbine design and optimization

- Aerodynamic design of turbines and compressors
- Automation and numerical optimization of 2D and 3D designs
- Digital mockup
- Optimization of structures
- Lifting
- Tools and processes for heat transfer analysis
- SAS analysis
- Detail design
- Damping analysis
- Performance optimization (MOPS)
- Thermodynamic modelling

Material Testing and Failure Analysis

- Destructive test techniques
- Thermo-mechanical fatigue testing
- Crack propagation and hardness tests
- LCF and HCF tests
- Wear and erosion tests
- Memory inquiry and quality assurance
- Further development and introduction of new inspection techniques
- Expert advice to characterize material properties
- Failure analysis of RIG and component testing



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