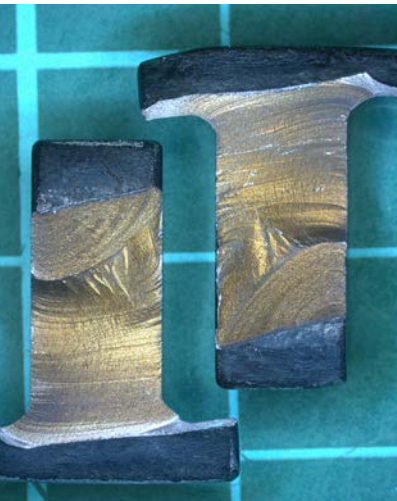


Service investigation and failure analysis

Our engine experts are your engine experts!



For more information,
contact: [MTUH-
Investigation@mtu.de](mailto:MTUH-Investigation@mtu.de)

At MTU Maintenance, we use our outstanding technical and engineering expertise to carry out independent investigations on behalf of operators for insurance purposes. We aim to identify the root causes of abnormal engine conditions and failures, make recommendations for prevention of these occurrences and help customers optimize their processes.

We have over 20 years of experience in carrying out investigations for a broad portfolio of commercial aircraft engines and complete around 60 full investigation reports per year.

You benefit from our technical expertise, meticulous documentation of primary and secondary damage as well as detailed investigation reports.

Our work covers a comprehensive range of analytical investigation including:

- Bearing failures
- Engine behavior/control
- Engine component failures
- FOD/DOD
- Fractography
- Metal debris in oil system
- Oil analysis
- Thermal induced degradation/corrosion

Furthermore, we can make recommendations for Service Bulletin incorporation, specialized MTU solutions for all your needs as well as support in compensation claims, whether your root cause is covered by the insurance company, the responsibility of others or the result of a component deficiency.

Our capabilities include:

- Inspections – visual, borescope, stereoscope, CT, microscopic, black light, x-ray, FPI
- Metallographic preparation and evaluation
- Metrology – ultrasonic, surface, roughness, laser scan, optical 3D measurements
- Mechanical testing – tensile, hardness, etc.

And through our extensive external network including high-tech universities and synergies with MTU Aero Engines as an OEM, we can provide:

- DNA analysis
- Material analysis – SEM, EDS, XRD, XRF
- OEM expertise – aerodynamics and structure
- Oil analysis
- Synthetics analysis – FTIR, ATR, DSC, ...

Your benefits

- Detailed reports
- Extensive technical expertise
- Recommended courses of action
- Wide range of capabilities

