

Non-Destructive Testing

for Aviation

A timely detection of flaws in aircraft parts or material is crucial to the safety of passengers, crew and cargo. We offer a huge variety of different Non-destructive Testing (NDT) methods and are able to detect irregularities in the airframe structure or component.

The performance of non-destructive testing is a critical factor to continue the airworthiness of any aircraft. Our inspection professionals will come with a high level of expertise, a lot of practical experience and are all Level II certified according to EN 4179 and NAS410, additionally we also offer Level III support. We have a wide range of reference standards for various aircraft models and a variety of state-of-the-art NDT test equipment. On request, our experts and equipment can also come to wherever your aircraft needs support.

Good to know: We can also repair eddy current probes and manufacture and certify reference standard.

Available testing methods

Ultrasonic Testing

Eddy Current Testing

Magnetic Particle Testing

Penetrant Testing

Thermographic Testing

Radiographic Testing



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Ultrasonic Testing (UT)

uses sound waves to locate defects within a component or material.

Application areas

- Detect delamination and disbond of composite parts
- Thickness measurement of composite and metallic parts
- Inspection of aircraft structure joints
- Phased array inspections



Ultrasonic Testing

Eddy Current Testing (ET)

is making use of electromagnetic induction to determine flaws within electrically conductive materials.

Application areas

- Surface and sub-surface cracks usually caused by fatigue or by stress corrosion
- Corrosion in aircraft structure
- Rotating probe testing in open bolt holes
- Conductivity test
- Coating thickness measurement



Eddy Current Testing

Magnetic Particle Testing (MT)

uses the phenomenon of magnetic flux leakage to detect defects in ferromagnetic aircraft parts at the surface and slightly below the surface.

Application areas

- Mobile service: Spot MPI
- Ferro-magnetic parts from aircraft, engines, landing gear. For example, bolts, nuts, shafts etc.



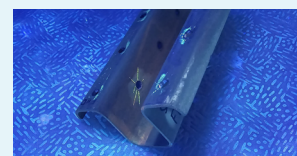
Magnetic Particle Testing

Penetrant Testing (PT)

procedures are applicable to a part manufactured from nonporous metallic or nonmetallic materials for the detection of discontinuities which are open to the surface of a part.

Application areas

- Mobile service: Spot FPI
- Detection of corrosion, cracks, pits, etc.



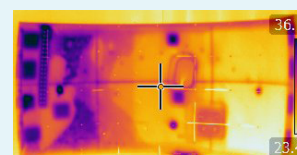
Penetrant Testing

Thermographic Testing (TT)

maps the surface temperatures of an object in order to detect anomalies in the heat flow.

Application areas

- Detect fluid inclusions, voids and disbonds in honeycomb structure



Thermographic Testing

Radiographic Testing (RT)

X-rays are used to detect defects inside of components or aircraft structure.

Application areas

- Checking metallic parts for cracks, porosity, corrosion etc.
- Checking non-metallic parts for fluid entrapment, crushed core and cracks

If you have any questions or cannot find the inspection requirements you need, please contact us and together we will find a solution that meets your specific requirements.

Contact

Lufthansa Technik AG
Laboratory & NDT Services
HAM T/TQ-MN
Weg beim Jäger 193 | 22335 Hamburg | Germany
Phone +49 40 5070 60592 / -60136
ham-ndt-team@lht.dlh.de

lufthansa-technik.com

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