

Accredited Test Laboratory



Sliding load test

The test laboratory of the Fraunhofer IGP is closely involved in the ongoing research projects by the faculties of the Institute. Test functions from the business sector are also handled here. In order to meet the high quality requirements from research and business, the test laboratory is accredited in accordance to **DIN EN ISO/IEC 17025:2005** by the German accreditation body **DAkkS**.

Since the founding of the test laboratory, extensive knowhow has been built up in the fields of experimental studies into materials, fasteners, joints and coating systems. The main focus of the work is not only on accredited tests, but also on standardised and non-standardised tests and component testing. The focus in these areas lies on the high standards of quality and the reproducibility of the tests. In addition, further standardised processes are being continuously added to the portfolio. The testing services offered by the laboratory include mechanical and technological tests, leak testing, corrosion tests, chemical and physical tests and surface characterisations. The laboratories have a broad machine park available for these applications. The testing portfolio is constantly being expanded and currently comprises the following tests:

Mechanical-technical testing

Tensile tests

Fatigue tests

3 and 4-point bending tests

Mechanically-joined connections: Friction coefficient, transverse longitudinal tensile capacity, tightening, torque and pre-loading force behaviour, vibration resistance

Adhesives joints, single- and multi-shear connections, caterpillar peeling tests

Notched bar impact tests

Vickers hardness testing

Leak testing by means of the helium leak test

Container and tank tests

Leak detection

Testing of joints

Corrosion testing

Vehicle painting (VDA)

Coating systems for steel structures (ISO 12944-6, ISO 20340)

Corrosion tests in artificial atmosphere

Outdoor weathering of coatings

Chemical-physical testing

[Akkreditierungsurkunde \[PDF](#)

Calcination of FRP composites

Spark discharge spectrometry of metals

[Anlage zur](#)
Determination of the hydrogen content in arc welded material

[Akkreditierungsurkunde \[PDF](#)

In addition to the broad range of testing services offered, the institute also has a metallography laboratory. Here we employ two material tester who are responsible for the preparation and conduction of various test procedures and for the analysis and documentation.

[Akkreditierte Prüfverfahren \[PDF](#)

The tests in the test laboratory department are conducted by a competent team of engineers and technicians with many years of experience in the development and configuration of measuring and testing apparatus. The main focuses of the work extend from the development and performance of the tests through to their evaluation.

Machines

Universal testing machines: Tensile / compressive tests up to 1000 kN, -80...250 °C

Dynamic testing machines up to 1000 kN

High frequency pulsators up to 100 kN

Drop weight tester up to 90 kN

Torque test bench up to 500 Nm

Contact



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https://www.igp.fraunhofer.de/en/Competences/Unterstuetzende_Bereiche/Akkreditiertes_Prueflabor.html

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