



Industrie Service

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Metallographic Investigations

During the planning, construction and operation of technical facilities and components a lot of factors have to be taken into consideration.

In addition to design and construction, the characteristics and processing of the used material play an important role. Materials are subject to mechanical-technological, thermal, wear and corrosive influences, all of which may lead to the component's failure. Don't take any risk here! Have your materials analyzed and evaluated for the designated application, for their processing characteristics and their conditions. TÜV SÜD offers extensive methods for materials testing and analyses.

TÜV SÜD services

Within the scope of examining and consulting services in materials technology as well as failure analysis the accredited laboratories of TÜV SÜD offer the following metallographic investigations:

- sample preparation of
 - steel
 - cast iron
 - special alloys
 - non-ferrous metals
 - ceramics
 - plastics

- sample preparation by
 - cutting (wet, dry)
 - embedding (warm, cold, vacuum)
 - polishing (electrolytic, mechanic)
 - etching
- structure investigation
 - macroscopic investigation of micro sections
 - microscopic investigation of micro sections
 - determination of crevices, corrosion, welding defects
 - investigation of surface coatings
 - identification of hardening areas
 - determination of grain size and degree of purity
 - on-site metallographic investigations (replica)

Your Benefits

By combining different methods of material investigations we offer results on

- ▶ the aptitude of the material with reference to the purpose of application
- ▶ the processing characteristics of the material
- ▶ the condition of the material.

Our laboratories are accredited as per DIN EN ISO/IEC 17025 and as an inspectorate type A as per DIN EN ISO/IEC 17020.

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