

Damage and material analysis

Expertises and reports

Qualitech AG has the largest private, independent and ISO/IEC accredited testing laboratory for loss analysis in Switzerland. In the technical-legal area we draw up expertises and reports for companies from industry and insurance as well as for lawyers and courts, both nationally and internationally.

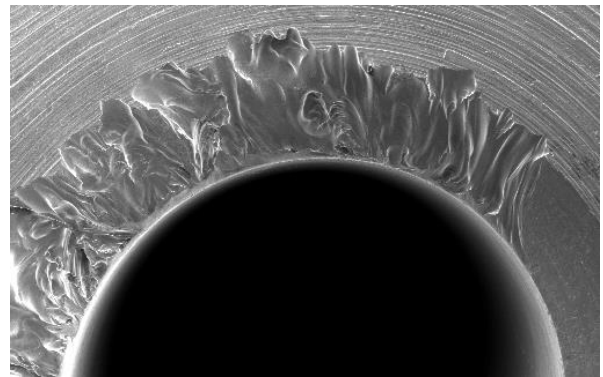
Clarifying facts and responsibilities

Damage can be caused by one or more factors and is often of a multifaceted nature. Today's complex value chains with several parties involved (buyers, suppliers, sub-suppliers) often lead to legal disputes in the event of a loss. Only by calling in a trustworthy and neutral testing laboratory can the facts and responsibilities be clarified. Our confidentiality and neutrality are based on our long-standing commitment and guarantee the systematic and

objective clarification of causes of damage and the definition of responsibilities in technical terms. In connection with specifications, functional specifications and standards, we also offer technical consulting and expert opinions. We help you to introduce improvements and preventive measures for the future and ensure the quality of your products so that your success can continue to grow on solid ground.



Vibration fracture in the cylinder block of a gas compressor, caused by a corrosion attack in the cooling water channel (macrophotography)



Erosion damage to a fuel valve caused by abrasive particles in the fluid flow (electron microscopy)

Methods of loss analysis

Depending on the type and significance of the damage, an adapted investigation programme is defined, usually together with the customer, in order to clarify the cause of the damage. In addition to the visual assessment, the microstructure or fracture surface is often examined more closely by means of microscopy. A comprehensive set of instruments is available to characterize samples with regard to chemical composition and physical and mechanical properties. Often, even the smallest amounts of corrosion products, coatings or foreign substances have to be analysed. For large damaged parts, information can also be obtained on site and non-destructively, e.g. through plastic impressions and microstructure replicas.

Further training

The Damage and Materials Analysis Group at Qualitech AG offers seminars on damage analysis and prevention, as well as corrosion and corrosion protection.



Selective corrosion on a duplex steel pump housing in a flue gas cleaning system (light microscopy)

