

Engineering Specialist Services – Assessment of plant

Investigation and assessment of equipment failures

Through mechanical and metallurgical testing and investigation we can help customers to learn from equipment failures.

What does the service include?

- Mechanical and metallurgical testing performed by our own UKAS accredited laboratory.
- Detailed stress analysis and fracture mechanics assessment of the failed component where appropriate.
- Comprehensive investigation report compiled by one of our experts on the equipment concerned.

Who does it affect and why?

Regulations such as LOLER¹, PUWER² or PSSR³ place duties on users/owners to ensure equipment is properly operated and maintained in order to prevent catastrophic failures of safety critical equipment and machinery such as pressure systems and lifting equipment. If a failure occurs, the root cause needs to be established.

Failures are not just limited to the equipment covered by the regulations referenced above. We are able to provide an investigation service for all types of equipment that we inspect, including local exhaust ventilation systems, electrical installations and playgrounds.

Failures can be symptomatic that the design, operation, maintenance or the means of examination of the equipment may be inadequate. Root cause needs to be determined to prevent future occurrences. This is particularly important if the failure relates to an incident which needs to be reported under RIDDOR (Reporting of Injuries, Diseases, and dangerous Occurrences Regulations).

Our approach

The first step is to undertake an initial site examination to look at the physical evidence and establish the facts concerning events surrounding the failure. This will allow us to establish what further investigation is necessary and whether the failed parts of the equipment can be sent to our laboratory for testing.

Once our investigation is complete we will compile a comprehensive report indicating the probable root cause and where appropriate include what steps should be taken to avoid future incidents.

**For more information
contact us on**

0121 698 5888

or visit
**[www.zurich.co.uk
/engineering](http://www.zurich.co.uk/engineering)**

¹LOLER - Lifting Operations and Lifting Equipment Regulations

²PUWER - Provision and Use of Work Equipment Regulations

³PSSR - Pressure Systems Safety Regulations