



ZURICH[®]

Engineering Specialist Services – Assessment of plant

Non-destructive testing

Non-destructive testing (NDT) detects and evaluates flaws in materials which could affect the serviceability of the material or structure and lead to loss of strength or failure in service. We carry out NDT where our customers require a high degree of confidence that equipment is free from significant defects.

What does the service include?

We test safety critical components such as specific statutory plant¹ using various NDT techniques that cause no harmful effects on the material or structure under test.

- Dye penetrant inspection (DPI), this is used for the detection of surface flaws in components made from non-magnetic materials.
- Magnetic particle inspection (MPI), this is used for the detection of surface flaws in components made from magnetic materials.
- Ultrasonic Testing (UT) which is used for the detection of sub-surface defects in components mainly made from steel.
- Eddy Current testing which is used for the detection of surface flaws (without the need to remove surface coatings such as paint).

Who does it affect and why?

Where you have equipment whose structural integrity is paramount to safety or critical to your process then ensuring that this equipment is free from defects is of high importance.

The techniques listed supplement the visual inspection and provide a much more comprehensive examination of the equipment to give you a high level of confidence that a critical structure is free from significant defects. It can also be used to accurately size defects within the structure for assessment against structural integrity codes and standards.

Our approach

The first step in the process is for one of our Senior Engineers to discuss with you your exact requirements. We will then arrange for the appropriate type of NDT be carried out followed by a detailed report which will advise of any defects and also detail their size, position and location.

Our dedicated team of NDT professionals are strategically spread across the country to provide a quality service which is UKAS accredited to EN17020.

¹Specific statutory plant is a term we use to describe:
Pressure systems as defined in PSSR and identified in a written scheme as requiring examination by a competent person.
Lifting equipment as defined by LOLER and requiring periodic examination by a competent person.
Work equipment defined in PUWER and either identified in a risk assessment as requiring period inspection by a competent person or power presses as defined in PUWER and requiring periodic examination by a competent person.

For more information
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