ITS
It’s our specialty and your safety

PROJECT MANAGEMENT.
QUALITY CONTROL AND ADVICE.
NON-DESTRUCTIVE TESTING.
QUALITY CONTROL AND ADVICE

Our team is not only focused on the non-destructive testing industry but also thrives on the QC marked. The field experience in all the disciplines mentioned in this folder is what clients are looking for. We assure full commitment and a dedicated team on projects worldwide.

One of our key benefits for our clients is that we work together with engineering companies and project management completion bodies. As a well-oiled team, we can create an insightful workflow and make the entire processes fully traceable.

VISUAL EXAMINATION

Visual examination (VT) is the oldest and most undervalued form of examination. It’s an NDT technique in which the inspector utilizes various measurement tools for examining welds or components in order to compare them to the applicable acceptance criteria.

DYE PENETRANT EXAMINATION

Dye Penetrant testing (PT) is a Non-Destructive Testing technique in which the examiner uses a penetrating fluid to locate any defects which have an open connection to the surface. This can be done in daylight conditions with red penetrant or in a darkened room under ultraviolet light with fluorescent penetrant for a higher sensitivity.

MAGNETIC EXAMINATION

Magnetic Particle Testing (MT) is a Non-Destructive Testing method through which the examiner can locate surface-breaking and subsurface defects in ferromagnetic materials. A magnetic field is applied, creating a flux leakage at the location of any defects. Iron oxide particles are then applied to the inspection surface, either in dry form or in a wet suspension. The flux leakage field will attract the iron particles, forming an indication on top of the surface material. This indication is then evaluated in accordance with required standards.
Ultrasonic Testing (UT) is a Non-Destructive Testing technique in which the examiner uses ultrasonic sound waves to detect internal imperfections in homogeneous materials, such as welded structural components, castings and forgings. In addition, the wall thickness of the material under test can be measured with great accuracy.

The Ultrasonic Phased Array probe consists of many small ultrasonic transducers, each of which can be pulsed independently. By varying the timing, for instance by pulsing the elements one by one in sequence along a row, a pattern of constructive interference is set up that results in a beam at a set angle. In other words, the beam can be steered electronically. The beam is swept like a search-light through the object being examined, and the data from multiple beams are put together to make a visual image showing a slice through the object.

Eddy current testing (ET) is a Non-Destructive Testing technique in which the examiner utilizes a principle based on electromagnetic induction. With this technique, both surface and deep-lying defects can be detected, even in multi-layer constructions. Whereby sub-surface indications can only be detected in non-ferrous materials.

With Positive Material Identification (PMI) you can analyse metal alloys (ferrous or non-ferrous) to determine their chemical composition. Typical methods for PMI include X-ray fluorescence (XRF) and optical emission spectrometry (OES). These techniques have been developed in such a way that even light elements such as P, S, Mg, Si, Al, and very low concentrations of C can be detected in a wide variety of alloys.

The preload in a bolt can be determined with the help of a specific ultrasonic technique. The measurement is based on accurately monitoring the elongation of the bolt.

Bolt preload monitoring can be used to check whether the bolts have been tightened correctly. It is also possible to check what the resulting bolt loads are after a period of time has elapsed, without needing to shut down the installation.
THE BEAMER

A useful “must-have” for all NDT technicians, engineers and fabrication designers that simplifies the indication drawing process. The virtually unbreakable kind of plastic and chemically printed surface ensures an extreme durability in any kind of environment.

For more information visit: utbeamer.com