



Choose certainty.
Add value.

Non-destructive testing for industrial plants and systems

Test components and systems for safety and compliance.

Your challenges

Industrial plant engineers, developers, operators and non-destructive testing (NDT) coordinators require NDT specialist consultancy services to test for weaknesses in a wide range of components and systems. These services will help to ensure compliance with design codes and statutory regulations for new construction projects as well as maintenance of existing plants. It is also important to identify the appropriate NDT method for each specific problem and to ensure accurate results from NDT.

What is NDT?

NDT methods are techniques that do not cause damage to the material being inspected, providing rapid delivery of robust results for preventive or corrective actions. For industrial plants, NDT methods are used for components in plant, vessel and pipeline construction, as well as cast and forged components, and pole and pipe systems.

Why is NDT important for your business?

NDT is critical in ensuring plant reliability, safety and conformance to legislative requirements. As NDT methods do not cause damage to components and systems, they offer advantages in terms of safety and cost effectiveness.

How can we help you?

TÜV SÜD's plant engineering experts have the technical expertise and experience to support you in carrying out challenging NDT tasks across all relevant fields of applications. Trained to perform testing in accordance with all international standards, our specialists are also certified in accordance with UIC 960 (DIN 27201-7), EN ISO 9712 (superseding EN473), ISO 9712, PCN, SNT-TC-1A and EN4179/NAS410.

Our NDT services

TÜV SÜD's comprehensive service package addresses the organisation, coordination, implementation, documentation and training requirements of NDT.



■ Knowledge services

Our experts provide inspection of test systems, advisory on the application of tests and special methods, and evaluation of data gathered through automated and semi-automated test systems. We also prepare documented procedures, test instructions and specifications.

■ Testing

TÜV SÜD's experts carry out NDT on components, systems and materials for quality assurance and as a basis for damage reports. We also offer services to address turnaround at industrial plants, including turnaround management and evaluation of results. Our methods include:

- Surface methods (visual testing, magnetic particle testing, penetrant testing, eddy current testing and hardness testing)
- Volumetric methods (radiographic testing, ultrasonic testing)
- Special methods (guided waves, phased array, time of flight diffraction, acoustic emission testing, leak rate testing, long range UT, magnetic flux leakage tank floor scanning, positive material identification, immersion UT, computed tomography, digital projection radiography and on field metallography by replicas)

■ Training

We assist you in developing a written practice describing staff training, experience and examination requirements. We also train and certify your staff in accordance with SNT-TC-1A of the American Society for Nondestructive Testing, EN ISO 9712 (superseding EN473), ISO 9712.

■ Package offers

We offer a complete package of knowledge services, testing and training solutions to assist you with all aspects of the NDT process including organisation, coordination, testing and recommendation of measures.

Your business benefits

- **Optimise plant safety** – by assuring a consistently high level of quality and safety in plant construction and refurbishment with our expert NDT services.
- **Improve operational availability** – by identifying weaknesses before they result in unscheduled downtime of your plants.
- **Minimise cost** – with our cost-effective support for critical decisions in defect determination and component replacement.
- **Benefit from global support** – with specialised technical support of NDT-related issues from our international team of experts.

Why choose TÜV SÜD?

TÜV SÜD is widely known as an independent third-party solutions provider that offers impartial and unbiased inspection and assessment services that our clients can base their decisions upon. With an established international presence, we can maintain a consistent level of premium TÜV SÜD quality in key markets globally. Our organisation possesses multidisciplinary expertise and extensive experience working with owners and operators of power stations, refineries, chemical and industrial plants, pipelines, railways, automotive, aeronautic/aerospace and infrastructure in the field of NDT. We also support manufacturers of pressure vessels and steel constructions, foundries and forgeries. In addition to being ISO/IEC 17025 and NADCAP accredited, our vast expertise allows us to support you in addressing any application of NDT.

Choose certainty. Add value.

TÜV SÜD is a premium quality, safety and sustainability solutions provider that specialises in testing, inspection, auditing, certification, training and knowledge services. Represented in over 800 locations worldwide, we hold accreditations in Europe, the Americas, the Middle East, Asia and Africa. By delivering objective solutions to our customers, we add tangible value to businesses, consumers and the environment.

Related services

TÜV SÜD provides the following related services:

- HAZOP procedure
- Risk-based inspection and maintenance
- Failure analysis