

Ultrasonic inspection

Expertise

TWI's three decades of in-depth experience in all areas of ultrasonic inspection has made it an acknowledged world-leader. Among its notable achievements is the development of novel technology for long-range detection of corrosion under insulation in process pipework. Recent project work has included:

- inspection of critical adhesive bonds in flight simulators
- development of inspection procedures for copper welds in waste nuclear fuel canisters
- monitoring of flaws in pressure vessels operating at high temperature
- optimisation of automated test procedures for welds in stainless steels

Resource

- state-of-the-art flaw detection equipment for manual & automated inspection
- PC controlled, high resolution immersion scanning system
- practical advice on inspection procedures & standards
- independent, third party assessment of inspection data
- training in conventional & advanced techniques
- specialised, on-site inspection services

Types of ultrasonic inspection:

- Phased Array Ultrasonic Testing (PAUT)
- Automated Ultrasonic Testing (AUT)
- Time of Flight Diffraction (TOFD)
- Immersion and large area ultrasonic mapping
- Ultrasonic bond testing
- Non-contact ultrasonics
- Ultrasonic modelling