**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)](http://www.twi.co.uk/content/ndt_paut.html)
* [Automated Ultrasonic Testing (AUT)](http://www.twi.co.uk/content/ndt_aut.html)
* [Time of Flight Diffraction (TOFD)](http://www.twi.co.uk/content/ndt_tofd.html)
* [Immersion and large area ultrasonic mapping](http://www.twi.co.uk/content/ndt_ultramap.html)
* [Ultrasonic bond testing](http://www.twi.co.uk/content/ndt_ultrabond.html)
* [Non-contact ultrasonics](http://www.twi.co.uk/content/ndt_ultratest.html)
* [Ultrasonic modelling](http://www.twi.co.uk/content/ndt_ultramod.html)