

Ultrasound



Ultrasound has been a primary inspection tool in the Power Generation and Petrochemical industries for many years. Many advances have been made over the last number of years in digital ultrasound technology which has further increased the use of this technique on critical plant components.

The Problem

Traditional ultrasonic techniques using analogue flaw detectors have been successfully used for volumetric inspections both pre and in-service for many years. However, it has been highlighted in recent pan-industry studies and specific experiences that the integrity of the inspections can be improved by the use of digital imaging technology.

The Challenge

To increase the use of digitised ultrasound technology where improvements are required to:

- improve sizing accuracy
- increase defect detection
- reduce false calls
- increase speed
- inspect components with difficult access and geometry
- produce hard copy results for repeatability.

Our Solution

Working closely with equipment suppliers a range of ultrasonic acquisition systems, imaging software and scanners have been developed which satisfy the requirements of a demanding industry where the inspection of safety critical plant is of paramount importance.

Product

- automated ultrasonic systems with pulse echo, phased array and TOFD
- dedicated scanners for rapid and accurate probe deployment on complex components
- validation procedures which ensures the integrity of each procedure
- highly experienced and well trained staff.

Benefits

- significant cost savings from fast high integrity scanning
- alternative to radiography
- improved plant life management from better detection parameters and accurate, repeatable data for metallurgical appraisal
- hard copy data reports.