LONG RANGE GUIDED WAVE ULTRASONIC INSPECTION SYSTEM



FOR ALL YOUR INSPECTION NEEDS



An advanced technology for detecting and analysing corrosion where access is difficult

Benefits

- Low cost screening with 100% coverage
- Focussing capability to evaluate corrosion distribution around pipe circumference
- Typical test range 60m from single location, ideal conditions can achieve 350m.
- Testing of pipes up to 48" diameter
- Proven capability on pipe in service up to 125 oC
- Reliable detection of 9% metal loss flaws
- Ideal where conventional testing is impossible or very costly e.g. clamped, insulated, elevated, sleeved or buried pipes.

Process

- Low frequency ultrasound is transmitted and received from a single location
- The guided waves used travel long distances, even in buried, submerged or insulated pipe
- Response from flaws is a function of their depth and circumferential extent
- Focussing allows ultrasound energy to be concentrated into a small region of pipe for detailed localised inspection
- Teletest® uses 'multi-mode' technology to characterise and quantify any flaw detected
- A laptop PC runs dedicated Teletest® data acquisition and analysis software. The flaw detector communicates with the PC via a high-speed data link
- The test equipment







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APPLICATIONS

Pipe types

- Seamless
- Longitudinally and spiral welded

Pipe materials

- Ferritic and stainless steels
- Other metals

Pipe situations

- Buried
- Air-to-soil interface
- Air-to-water interface
- Elevated on racks
- Sleeved in road crossings
- Wall, bund or berm penetrations

Flaws found

- External corrosion
- Corrosion under insulation (CUI)
- Internal corrosion or erosion
- Environmental cracking

Pipe coatings etc.

- Foam or mineral wool
- PVC, epoxy, coal tar epoxy
- Paint
- Bitumastic wrapping

Pipe duties

- Transmission and distribution lines
- Refinery and chemical plant
- Offshore risers
- Jetty lines
- Tank farm link lines
- Power plant service pipe
- Storage sphere support legs
- Headers





