



Long Range Ultrasonics

Long range ultrasonic scanning of piping is one of a number of services offered by market leaders in corrosion detection and assessment.



Low frequency ultrasonic guided waves allow for rapid surveys of long sections of pipe. Often this amounts to tens of metres from a single test point, in either direction. Although cost savings are greatest for insulated lines, the system is equally effective for uninsulated pipe.

Guided wave technology minimises access needs and surface preparation for inspection. This in turn translates into substantial savings in insulation removal and reinstatement, scaffolding and so forth.

Corroded areas identified in a long range UT survey will normally require verification. This may be with ultrasonics or the Incotest system. Incotest will provide a quick measure of wall loss without removing insulation. Manual, contact ultrasonics or corrosion mapping provides the most detailed information about the extent and nature of any corrosion damage.

Applications

- Sleeved and insulated pipe work in oil, gas and petrochemical installations.
- Offshore riser inspection.
- Inaccessible regions: under pipe supports, storage tank bund wall penetrations, road crossings, under bridges etc.
- Equally applicable to stainless steel lines and spirally welded pipe.

“Making a Visible Difference”



Capabilities

- Uses low frequency ultrasonic guided waves that travel tens of metres in pipe from a single source.
- Provides 100% coverage. Guided waves can travel around bends, branches and so forth but this needs to be assessed for a particular pipe run.
- Suitable for pipe diameters 2" to 60".
- Sensitive to both internal and external metal loss equivalent to 9% of pipe wall cross section.
- Ability to electronically transfer information allowing remote evaluation of all data generated.

Benefits

- Reduction in the costs of gaining access to the pipes for inspection.
- Rapid survey of lines; as much as 1km per day under good conditions.
- Avoid removal and reinstatement of large areas of insulation.
- Able to inspect inaccessible areas such as those under pipe clamps, under roads, sleeved pipes or in some locations partially buried pipes.

