Guided Wave Testing Case Study 5
Inspection of Pipelines for Corrosion Under Insulation

Corrosion under insulation (CUI), such as mineral wool or PE foam materials is a major problem in the petrochemical industry. Guided wave testing can inspect long lengths of pipes without requiring the removal of insulation over the entire length.

Job Details

- 8" Jet fuel line
- Painted pipe surface
- Mineral wool insulation
- Pipe resting on simple supports

Main Findings

- An area of corrosion was positively identified under insulation
- Removal of insulation confirmed the presence of heavy corrosion allowing direct examination

Equipment:

- Wavemaker® G3
- Inflatable Ring

An overview of the 8" insulated pipe resting on the pipe rack.

An area of severe corrosion on the 8" insulated pipe.

Clock position

-90  -70  -50  -30  -10  10  30  50  70  90

Amplitude (dB)

Distance (m)