

GWUT -Guided Wave Ultrasonic Testing

Advanced Services



A Powerful Screening Tool

Guided wave ultrasonic testing (GWUT), also known as long range ultrasonic testing (LRUT), is a screening tool for rapidly testing long lengths of pipe from a single inspection point.

GWUT provides %100 coverage of the pipe wall without having to remove insulation or coating. It quickly identifies areas of corrosion or erosion that may then undergo more detailed inspections using other NDT techniques, such as radiography or 3D structured light.



Performing GWUT on a road crossing 10" gas pipe



Inspect Difficult-to-Access Systems

GWUT can inspect systems that are hard to access, such as:

- Insulated pipe in refineries
- Offshore pipeline risers
- Cased road or railway crossings
- River or bridge pipeline crossings
- Tank dyke pipeline crossings
- Loading lines and associated pipe work
- Above ground or buried flow lines.

TechCorr's GWUT inspections of cased road or railway crossings meet US DOT inspection requirements.



Most effective on Straight sections

GWUT works most effectively in straight sections of pipe. The ultrasonic signal will be attenuated or totally absorbed by elbows, flanges, tees, welded supports, socked welds, and other obstacles.

To guarantee %100 coverage, additional inspection locations are required before and after every disruptive feature.



Thorough Reports

TechCorr's GWUT screening reports provide thorough information about the inspected areas, including items such as:

- Summaries of pipe condition
- Photos of critical areas
- Annotated schematics
- Tables and graphs detailing the GWUT results
- Follow-up reports detailing the results of further inspections.



Comprehensive industrial services

The TechCorr advantage is that we provide a wide array industrial services, making our firm a one-stop shop. Our services include:

- Non-destructive testing (NDT)
- Corrosion engineering
- Corrosion under insulation programs
- Mechanical integrity and reliability programs
- Shutdown and turnaround support
- Pipeline and oilfield fabrication.





