

Application note

Corrosion mapping with two-axis scanner

Customer need

Industrial assets corrode and erode. Corrosion maps are an invaluable tool for locating suspect areas of corrosion as well as for comparison over time.

However, currently available corrosion mapping systems are often difficult to set up consistently between operators and over time.



Customer solution

By utilizing the workflow guided concept of Waygate Technologies' Mentor UT, technician set-up time can be minimized--enabling asset owners to consistently receive corrosion maps time and time again.

Key features

- Customizable Corrosion DM App on the Mentor UT provides a guided workflow to standardize and reduce time for calibration and set-up of inspection
- Touch screen operation for fast and easy interrogation of suspect areas
- DM Array probe optimized for pitting corrosion detection
 - Modular probe design for cost effective replacement
- 2-axis SwitchGear Scanner for consistent coupling pressure during scanning



Switch Gear Scanner



Modular DM Probe

Application

Inspection of assets subject to internal corrosion and erosive wall loss such as piping, storage tanks, and other critical assets; requiring mapping and visual display of remaining wall thickness. Two-axis X-Y scanner for efficient corrosion inspections.

Modality

Ultrasonic (Phased Array)

Industry

Oil & Gas and Power Generation



A, C and E scans, selectable measurements, and touch screen operation

Equipment used

- Mentor UT Phased Array Flaw Detector - P/N 100N3883
- DM Acoustic Module (5 MHz x 1.5 mm) - P/N DMARRAY_MOD1
- Probe Cable (3 m; Top Exit) - P/N DMCABLE_3M_TOP
- Two Axis Scanner - P/N MUT-SWGMAN300
- Encoder Cable (3 m) - P/N MUT-SWG-CBL3M