

Corrosion Inspection Solutions

Aerospace
Automotive

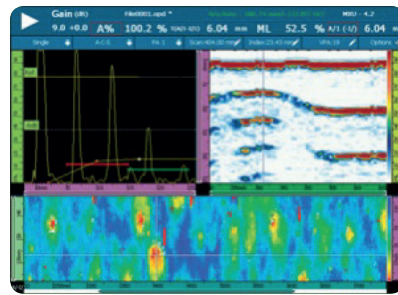
Manufacturing
Power Generation

Steel/Materials
Tube/Rod/Bar Sheet Metal

Phased Array Ultrasound

High-resolution corrosion mapping in large areas

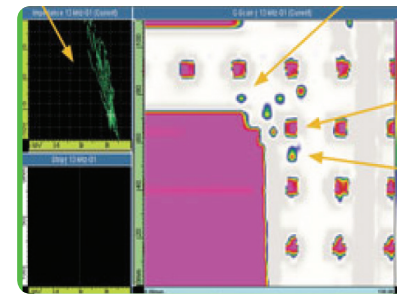
- Accurately map part thickness
- Scan very large areas quickly
- Data can be easily exported for further analysis



Eddy Current Array

Map corrosion below surfaces

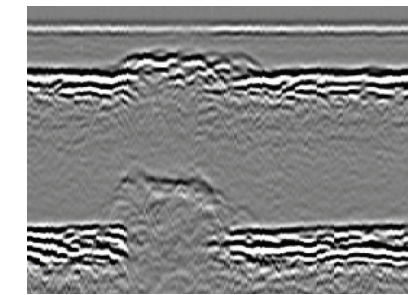
- Detect surface corrosion like stress corrosion cracking (SCC) or surface and sub-surface corrosion on aluminum
- No need to remove paint; fewer steps means time-savings
- Green method (no chemicals involved)



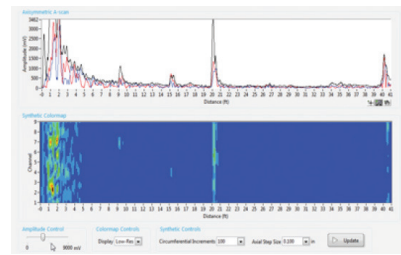
Ultrasound Time-of-Flight Diffraction

Weld root evaluation per ASME VIII Division 1 and 2 and erosion damage

- Evaluate the depth and length of the damaged area
- Quick imaging and simple inspection
- Not sensitive to the internal orientation of damages



Guided Wave



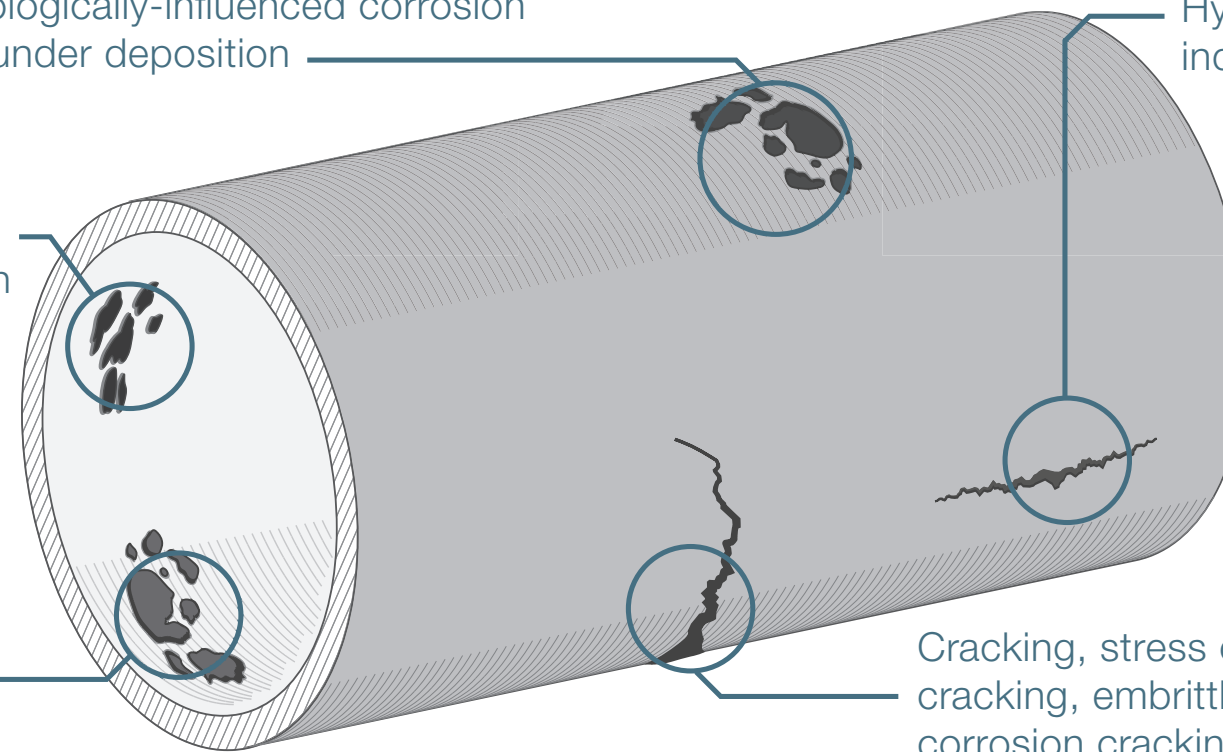
Monitor corroded pipes over long distance

- Improve productivity by screening pipes over long distances to identify potential corrosion areas
- Scan coated, insulated, buried, vertical lines, and other areas with limited access to reduce operating costs
- 100% screening coverage of pipe wall

External microbiologically-influenced corrosion (MIC), oxidation under deposition

Internal pitting or uniform corrosion

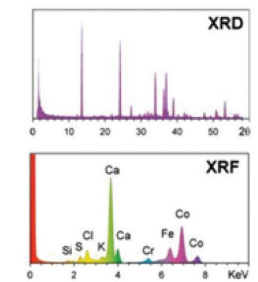
Flow induced corrosion



Hydrogen induced cracking

Cracking, stress corrosion cracking, embrittlement, sulfide corrosion cracking

X-ray Fluorescence and Diffraction



Portable XRF and XRD

- XRF provides on-the-spot material chemistry to identify whether critical components are made of the right alloy
- Portable XRD technology enables users to identify the mineralogy of corrosion scaling and the root cause to help prevent further corrosion

Conventional Ultrasound

Corrosion under uneven surfaces using EMAT

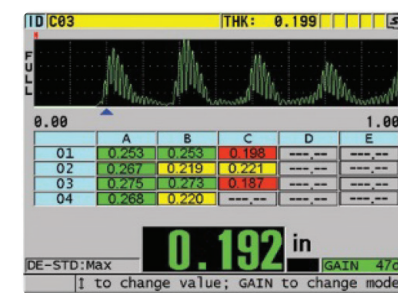
- Measure corrosion under external oxide scaled surfaces
- No couplant required
- Can be used on high-temperature surfaces



Conventional Ultrasound

Measure remaining wall thickness

- Special delay lines may be used on surfaces up to 260° C (500° F)
- Use an encoded scanner to generate encoded B-scans of remaining wall thickness
- Boiler tube and internal oxide scale layer measurement



Remote Visual Inspection

3D stereo measurement for quicker decision making

- Responsive videoscopes enable visual inspection of inspect hard-to-reach welds
- Increase the probability of detection with sharp, vivid images that help make inspection fast and efficient
- Improved 3D stereo measurement capability for in-situ defect measurement

