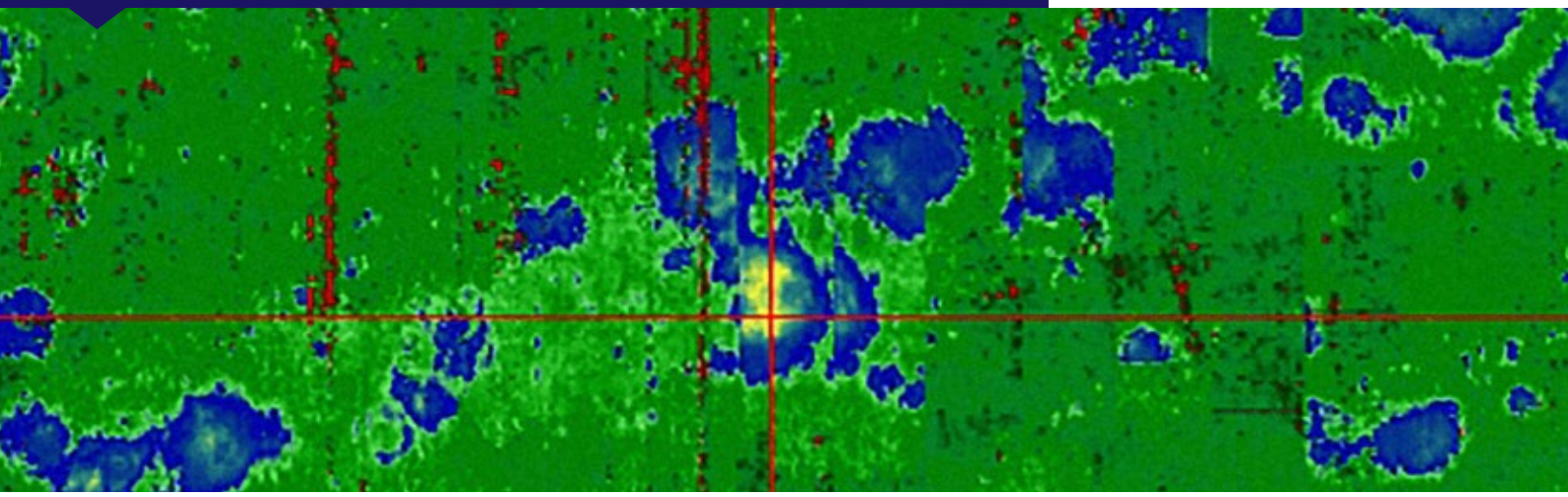
HYDROFORM PAUT CORROSION MAPPING

DACON INSPECTION SERVICES

FOR ALL YOUR INSPECTION NEEDS

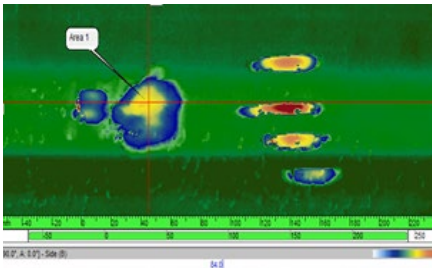


The HydroFORM scanner is designed to offer the best inspection solution for detecting wall thickness reductions due to corrosion, abrasion and erosion.

In addition, HydroFORM detects mid-wall damage such as hydrogen induced blistering or manufacturing induced laminations and it easily differentiates these anomalies from loss of wall thickness.

Using phased array ultrasound technology, the HydroFORM offers high resolution (1mm x 1mm)and fast coverage. The HydroFORM has a 60 mm wide effective beam and can scan at a speed up to 100 mm/s.

The scanner concept creates a local immersion technique which enables conforming to rough and uneven surfaces. No wedges are used with the Hydro FORM, thus scanning can be performed when external corrosion is present



What are some advantages of corrosion mapping?

The main advantage of corrosion mapping is that it guarantees 100 percent scan coverage of the area under examination. This gives a much improved effectiveness over standard 'random' UT wall thickness scans, where it cannot be demonstrated whether a specific area has been fully examined or not. Tests with a corrosion mapping system will quickly show this.

Another practical advantages that corrosion mapping produces a permanent record of corrosion measurements. This allows comparisons to be made between subsequent in-service inspections to check the rate at which corrosion is progressing. A corrosion monitoring program is optimal with this inspection.

C Scan display allows easy interpretation of present corrosion. As the probe is moved within the scan area the system assigns the relevant colour to each pixel and the image is built up into a topographical view presentation.
Any variations of thickness can be easily identified and corrosion/erosion trends can easily be seen.