

Ultrasonic C-Scan

Automated ultrasonic C-scan is a technique that utilises ultrasound and mechanised scanners to build a comprehensive plan view of the component being inspected. Typical plan-view imaging is displayed in colour-coded maps according to the thicknesses obtained throughout the inspection area. Calibrated dual-axis encoders provide a scale map to measure the lengths and widths of the indications found.



THE Applus+ SOLUTION

Applus+ has extensive experience in semi-automated/automated, ultrasonic data-collection techniques. Making use of both proprietary collection platforms and industry-leading technologies, Applus+ helps its clients to accurately assess corrosion cells and potential weldment indications in a topographical plan view.

Target customers

Automated ultrasonic C-scan can be employed on a variety of equipment components, providing detailed corrosion-mapping thickness data. The information provided can be used to calculate remaining life and retirement dates, linear averaging and corrosion-cell interaction as well as for engineering calculations and on-stream inspections to comply with relevant jurisdiction or recommended practice.

Typical industries include:

- Upstream
- Midstream
- Downstream
- Transport pipelines
- Refining



- New construction
- Power
- Aerospace
- Nuclear
- Offshore
- Maintenance

Key customer benefits

Automated C-scan inspections provide substantial amounts of quantifiable thickness data. The resolution of the examination area can be adjusted to suit the client's needs for classification, calculations and other requirements.

With improved defect detection and rapid component coverage, our clients can rest assured that no areas of potential damage will be left unseen, thereby making savings in terms of project time and costs. Deliverables from the resulting data are easily interpreted by untrained end users and can be retrieved for further scrutiny.