



DACON Phased Array Ultrasonic Testing Instructions

[Home](#) » [DACON](#) » DACON Phased Array Ultrasonic Testing Instructions 

Contents

- [1 DACON Phased Array Ultrasonic Testing](#)
- [2 Product Information](#)
- [3 Product Usage Instructions](#)
- [4 PAUT CORROSION MAPPING](#)
- [5 PAUT WELD SCANNING](#)
- [6 Documents / Resources](#)
 - [6.1 References](#)



DACON Phased Array Ultrasonic Testing



Product Information

Specifications:

- **Product Name:** PHASED ARRAY ULTRASONIC TESTING
- **Usage:** Elevated Temperature Inspection
- **Website:** www.dacon-inspection.com

Product Usage Instructions

Elevated Temperature Inspection:

When conducting elevated temperature inspections, it is important to consider the thermal gradients inside the wedge. These gradients can lead to variations in temperature-dependent wave velocity and skewing of the waves. To overcome these limitations, utilize software simulation of focal law algorithms combined with careful experimental validation. This approach has been proven to be reliable and accurate.

FAQ (Frequently Asked Questions)

- **Q: How can I ensure accurate results during elevated temperature inspections?**

A: To ensure accuracy during elevated temperature inspections, make sure to account for thermal gradients inside the wedge and use software simulation to validate the results.

Dacon inspection technologies, now provide PAUT services both for weld testing and corrosion mapping for pipelines and pressure vessels for up to 350° degree Celsius.

PAUT CORROSION MAPPING

With the same accuracy as inspecting at ambient temperatures to find remaining wall thickness.



PAUT WELD SCANNING

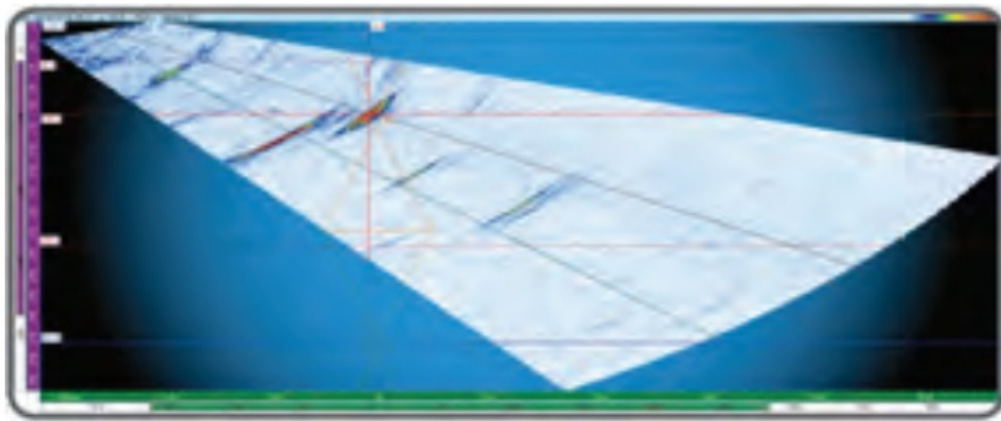
Form simple butt welds to less accessible flange surface can be inspected with precision accuracy.

Benefits

Interruption of plant operation can be avoided if NDT inspections can be performed on-line at operating temperatures; this may be done up to 350° C using PAUT. This capability avoids costly downtime and reduces the risk of damage from thermal cycling associated with periodic shutdowns. These elevated temperature inspections provide accurate method of monitoring known flaws, and detection of new flaws without removing the vessels from service with high degree of repeatability, thereby actualizing significant cost savings.

Elevated Temperature Inspection

At elevated temperatures, thermal gradients inside the wedge lead to variations in temperature-dependent wave velocity and skewing the waves. Using software simulation of focal law algorithms and through careful experimental validation, these limitations can be overcome and has been proven to be reliable and accurate.



www.dacon-inspection.com

Documents / Resources



[DAICON Phased Array Ultrasonic Testing \[pdf\] Instructions](#)
Phased Array Ultrasonic Testing, Array Ultrasonic Testing, Ultrasonic Testing, Testing

References

- [✕ Inline Inspection Technology | Dexon Technology](#)
- [User Manual](#)

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