

# NDTS ADVANCED INSPECTION TECHNOLOGY

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### Phased Array

NDTS has the knowledge, expertise and experience to perform conventional and advanced NDT inspections throughout our office and project network.

NDTS uses the state of the art OmniScan MX Mainframe with Phased Array TOFD Acquisition Modules, combined with multipurpose scanners and modulators.

Phased Array (UTPA) provides sharper detection capability for off-angle cracks, and is capable of displaying multiple presentations simultaneously. PA applies computer-controlled excitation to individual elements in a multi-element probe. (UTPA) is an advanced pulse-echo technique that utilizes multiple miniaturized transducers and time-delays to shape the ultrasonic sound beam to a desired angle and focus. The versatility of the system permits simultaneous views of different presentations, such as sectoral views as well as A-Scan, B-Scan and C-Scan representations.

When compared with manual pulse-echo techniques, the advantages of Phased Array testing are its excellent repeatability, increased inspection speed, more accurate results. Moreover, Phased Array allows the digital storage of all data, location and system settings, and is very much safer to operate within a working environment, compared with Non-Destructive Testing methods that use X-rays and gamma-rays for detecting imperfections.

NDTS have provided Phased Array services since 2008 to TCO and KPO facilities.

