

Ultrasonic Shear Wave

The ultrasonic shear wave method is a technique which encompasses angle beam ultrasonic testing to identify subsurface anomalies not found directly underneath the transducer itself. Shear wave ultrasonic testing uses ultrasonic energy that is reflected back to the transducer from indications within a material and or weld. This is displayed as an A-scan, from which an operator can review the relevant information to assess the integrity of the component.



THE Applus+ SOLUTION

Applus+ has developed proven and tested procedures for shear wave ultrasonic testing in accordance with applicable codes. The UT NDT technicians at Applus+ are rigorously trained and assessed on data acquisition and interpretation, both internally and externally.

Target customers

Applus+ deploys shear wave NDT and testing on a variety of equipment as part of asset integrity inspections and across a vast range of field, including:

- Upstream
- Midstream
- Downstream
- Transport pipelines
- Refining
- New construction
- Power
- Aerospace
- Nuclear
- Offshore

- Maintenance

Key customer benefits

The use of ultrasonic shear wave testing has all the advantages of weld inspection with no inherent safety concerns, no disruption of production due to radiation hazards, near real-time inspection results, and vertical defect sizing for engineering critical assessments. Shear wave ultrasonic testing can provide information to assess indications on surface and subsurface of anomalies detrimental to the end use of components. Ultrasonic shear wave can also provide a high degree of accuracy of estimates in discontinuity size, shape and orientation. Shear wave inspection only requires access to one side of the component, with minimal specimen surface preparation.