

TIME OF FLIGHT DIFFRACTION

The Time-of-flight-Diffraction (ToFD) method of advanced ultrasonic testing is a sensitive and accurate method for the non-destructive testing of welds for defects. The use of ToFD enables defect sizes to be measured more accurately and repeatably. Inspections can be conducted with In-Service plant being kept on-line in most situations; this allows most process plant to be in operation as long as possible with minimal risk of failure. Results can readily be used for Fitness for Service assessment and defect monitoring.

Benefits

- Fast, reliable and repeatable inspection
- Accurate flaw sizing
- 100% record of areas inspected
- Defect analysis relative to dimensions and position
- Ability to evaluate known areas of interest and compare with previous inspections
- Process plant may be inspected whilst on-line
- Construction, Maintenance and Process Operations are able to continue without disruption
- Significant cost savings relative to conventional systems such as radiographic inspection
- Data digitally recorded and available for further analysis
- Not affected by defect orientation

Applications

- New-fabrication Weld Inspection
- In-Service Inspection – Weld and ToFD Screening

Manual Scanners

CAN offers several robust scanner assemblies from key manufacturers including the Magman, Flex, Chain scanner and Versa mouse. The choice of scanner is dependent on the application with several being readily available.

