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ULTRASONIC THICKNESS MEASUREMENT (UTM)

About This Course:

Ultrasonic thickness measurement (UTM) is commonly used and the method can be applied to a wide range of structures and components that includes ship hulls, piping, pressure vessels and structural steel.

Detection of metal loss caused by corrosion, erosion or damage is vital to ensure the continued safety and operation of the inspected item/structure. It can also help determine if repair work or replacement is needed or if the item/structure should be retired. Ultrasonic thickness measurement data gives customers the necessary information required to determine if the tested item has the adequate metal thickness for which it was designed.

Duration:
4 Days Theoretical & Practical
In-class +assessment day

ASNT Corporate Partner
The American Society for Nondestructive Testing

Remark:

Public training course
Registration is Open
Online registration is required
Contact us:

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Syllabus for ultrasonic test in level I/II

1. Basic about sonic and ultrasonic wave.
2. Methods and techniques used for ultrasonic test.
3. Distance calibration for single crystal normal probe.
4. Distance calibration for dual normal probes.
5. Advantage and disadvantage during testing with normal single and dual crystal probes.
6. Defect detecting and sizing with normal probes.
7. Angle probe: its sounds and its application.
8. Steps for distance calibration with angle probe.
9. Defect detecting and sizing with angle probe.
10. Echo or indication interpreting, evaluating and finally judgement on detected echoes.
11. Sensitivity calibration and methods.
12. Drawing DAC curve for sensitivity calibration with normal and angle probes.
13. Weld testing by using ASME SEC.V, detecting defects and sizing by angle probes.
14. Weld testing by using AWD D1.1, detecting defects and sizing by angle probes.
15. Acceptance criteria in AWS D1.1 and ASME SEC V.
16. Standard procedure for a welded ultrasonic test.
17. Documentation and reporting results of ultrasonic weld test.
18. Review course objects and exam.