

Course Outcome Summary

Standard Course

WELD-135 Ultrasonic Testing-Level I

Course Information

Division ASET
Contact Hours 45
Theory 15
Lab Hours 30
Total Credits 2

Prerequisites WELD 130 Introduction to Non-Destructive Testing and ELEC 125

Course Description

This is a first level course in Ultrasonic Testing (UT). The students will learn the principles of sound wave propagation and attenuation, generation, nature, types and properties of sound waves and modes will be studied. Testing methods and techniques, responses from a variety of flaws, equipment and its operating principles to detect flaws by using different detectors will be taught during the practical sessions. Standard reference blocks and calibration will be used. Procedure and codes for acceptance and rejection criteria for flaws will be taught.

Course Outcomes

In order to evidence success in this course, students will be able to:

- 1. Demonstrate ultrasonic testing (UT) inspection methods
- 2. Identify ultrasonic inspection techniques and process variables
- 3. Select the tools and set ups for the UT method
- 4. Calibrate a UT tester
- 5. Prepare reports describing test results
- 6. Prepare for ASNT UT Level I test battery

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