

Course Outcome Summary

Standard Course

WELD-136 Ultrasonic-Level II

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

Prerequisites WELD-135, Ultrasonic-Level 1

Course Description

This is the continuation of the Level I course. However, the same aspects are studied at a higher level of difficulty and responsibility. The principles of sound wave propagation and attenuation, generation, nature, types and properties of sound waves and modes will be studied. There will be focus on the cause of defects. Testing methods and techniques, responses from a variety of flaws, equipment and its operating principles to detect flaws and their causes 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 an in-depth understanding of the ultrasonic testing (UT) inspection method
- 2. Identify ultrasonic inspection techniques and process variables
- 3. Select the tools and set ups for UT method
- 4. Explain the scope and limitations of UT methods
- 5. Interpret and analyze UT defects
- 6. Demonstrate competency in the scope and limitations of the UT methods
- 7. Prepare reports describing test results
- 8. Prepare for the ANST UT Level II test battery

Date Updated: August 5, 2021 By: Mark A. Jager