

## Introduction to Industrial Ultrasound Inspection

Course No. TT-US-Intro

Critical assets are found in every industrial and commercial facility. They are costly to purchase, operate and maintain. An unexpected failure can result in expensive loss of production and increased repair costs.

This is an introductory hands-on course in which the theory, principles and practices of Industrial Ultrasound Technology are taught. The course offers 8 hours of classroom and hands-on instruction. The student will leave this class with a basic understanding of how to properly use airborne and structure borne ultrasound to better operate, maintain and troubleshoot plant equipment.

Each student receives the complete course materials on a USB memory stick and a certificate of course completion.

### Course Outline:

- Theory of sound
- Basic physics of ultrasound
- Ultrasound wave transmission and effects
- Effectiveness of Airborne Ultrasound
- Applications overview
- Equipment/instrument overview
- ASTM standard test methods
- Leak detection
- Electrical inspection
- Mechanical inspection
- Steam traps
- Valves
- Gears
- Pumps
- Motors
- Fans
- Compressors
- Bearing Inspection/Trending Concepts
- Isolating Sound Sources
- Condition based lubrication



### Who Should Attend This Course?

Electricians, mechanics, supervisors, operators, Condition Monitoring technicians and others seeking introductory knowledge of ultrasound for use in maintenance and troubleshooting. Bring your questions to class.

**Contact Torq Engineering** at (970)412-9337 to schedule a class.