IFF MA 18/EN

ULTRASONIC EXAMINATION OF ORGANS AND STRUCTURES - LEVEL 2



TARGET AUDIENCE

Non-Destructive Testing Managers.



GOALS

- Establish ultrasonic inspection procedures;
- Guide and advise ultrasonic operators effectively (level 1).



PREREQUISITES

Visual acuity checked, minimum 3 months experience in ultrasonic inspection;

Have completed the IFF MA 14 "Ultrasonic Examination, Axle Application-Level 1" course



EDUCATIONAL MODALITIES

Training combining theory and practical application in a workshop equipped with several ultrasonic axle testing stands. All standard equipment and apparatus will be used during the training.



DURATION: 13,5 days





PROGRAM

- Have sufficient knowledge for the training (assessment of knowledge as an ultrasonic operator level 1)
- Know and understand the principles and purposes of nondestructive testing and basic metallurgical phenomena;
- Identify the possibilities and limits of NDT according to the cases and quote the principles of safety of operation;
- Define the different defects contained in the parts according to their manufacture, use or maintenance of the rolling stock;
- Understand the physical phenomena related to wave propagation (repeat basic mathematics);
- Explain and demonstrate the consequences of the transport of energy on an ultrasonic wave in one medium or on its passage through a second medium;
- Use straight or oblique soundings to control wheels or axles;
- Set up the means to produce ultrasound using natural piezoelectric pellets;
- Be able to detect anomalies in a work situation.



