

IFF MA14 / EN

ULTRASONIC TESTING (UT), LEVEL 1, AXLE APPLICATION



TARGET AUDIENCE

- Operators
- Non-Destructive Testing Managers



GOALS

Understand the purposes of non-destructive testing and know how to perform ultrasonic testing of axles.



PREREQUISITES

- Visual acuity checked;
- Have a minimum of 3 months experience in the running gear business;
- Have followed the IFF MA01 "Basic technology of running gear" training.



EDUCATIONAL MODALITIES

- Training combining theory and practice in a workshop equipped with several ultrasonic test stands for the axles, all standard equipment and fittings will be used during the training.



DURATION: 3 Weeks



PROGRAM

- Master the knowledge related to axle maintenance and know the faults encountered in maintenance;
- Determine the principles, purposes and limits of non-destructive testing;
- Understand and implement the technique by transmission, reflection and resonance;
- Operate ultrasound devices, know how to calibrate them (distance, sensitivity); Know how to probe an axle by atheizing a straight probe (control of rolling tables);
- Understand the physical phenomena involved in ultrasound tests;
- Know how to probe an axle on an oblique path (use a prism, respect the positioning, know the principles of a study of trajectories, search for beginnings following an END sheet);
- Know the oblique soundings in combined routes;
- Know how to probe an organ by automatic phased array control (immersion controls).

• **Level 2 assessment:** Skills assessment acquired at the end of training ➔ **Yes**