

IFF MA16/ EN

PENETRANT TESTING (PT)- LEVEL 1



TARGET AUDIENCE

Operators / Non-Destructive Testing Managers.



GOALS

Perform a penetrant test, understand the purpose of Non-Destructive Testing as well as the physico-chemical phenomena implemented in PT.



PREREQUISITES

- Visual acuity verified, have a minimum of 3 months experience in the running gear activity;
- Have followed IFF MA01 "Basic technology of running gear" training.



EDUCATIONAL MODALITIES

Training combining theory and practice in a workshop equipped with several test stands by penetrant testing on railway parts.
All standard equipment and devices will be used during the training.



DURATION: 4,5 Days



PROGRAM

- Determine the purposes of non-destructive testing and have sufficient knowledge in the field of maintenance of railway components and structures;
- Know the manufacturing processes and the behavior of materials, and the different non-destructive testing methods;
- Know the main physico-chemical phenomena involved in PT;
- Know the equipment, products and the main procedures necessary for PT, be able to implement all the operations prior to PT;
- Put into practice the different PT techniques (interpret the procedure, prepare the surfaces, apply the developer);
- Detect and classify faults, know how to record the results of the checks carried out;
- Apply the health and safety rules related to the risks inherent to the equipment and products used.

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