

# € TRAINING

Inspection NDT with DP and MPI





# Inspection NDT with DP and MPI

## Introduction:

This training program is designed to provide participants with a solid foundation in Non-Destructive Testing NDT techniques, with a focus on Dye Penetrant Testing DP and Magnetic Particle Inspection MPI. It equips participants with the essential knowledge and practical skills required to effectively perform inspections, identify defects, and ensure the structural integrity of various materials and components.

## Program Objectives:

At the end of this program, participants will be able to:

- Introduce NDT Techniques, including fundamental principles and safety guidelines.
- Develop hands-on proficiency in NDT methodologies.
- Enhance defect recognition skills to ensure effective inspection and evaluation processes.

## Targeted Audience:

- Quality control and assurance professionals.
- NDT technicians and inspectors.
- Engineers and technicians in manufacturing industries.
- Maintenance and service personnel.

## Program Outlines:

### Unit 1:

#### Introduction to NDT:

- Importance and applications of NDT techniques.
- Overview of various NDT methods.
- Basic principles of DP and MPI.

### Unit 2:

#### Dye Penetrant Testing DP:

- Penetrant materials and their properties.
- Steps involved in DP inspection.
- Interpretation of DP results.
- Hands-on DP demonstration and practice.

### Unit 3:

#### Magnetic Particle Inspection MPI:

- Magnetic fields and principles of MPI.
- Types of magnetic particles and carriers.
- Conducting MPI inspections.
- Hands-on MPI demonstration and practice.

### Unit 4:

#### Defect Characterization:

- Understanding different types of defects.
- Factors influencing defect visibility.
- Interpreting defect indications.
- Case studies and real-world examples.

### Unit 5:

#### Safety:

- Safety precautions during NDT inspections.
- Environmental considerations.
- Q&A session.