# RADIOGRAPHY TESTING

## SCOPE

This course introduces the basic principles of Radiographic Testing and prepares the candidate to:

- To identify suitability of Radiography Testing for the material and inspection technique.
- To assign the work for the Level-I operator, i.e. the procedure to follow and to develop the inspection techniques.
- c) Analyse the documents and the test results.
- Familiar with codes, standards and specifications of Radiography Testing.
- e) Conduct the inspection process in a safety manner.

## MODULES

#### MODULE 1: INTRODUCTION & PRINCIPLES

- ☐ Nuclear Physics Interaction of Radiation with Matter.
- ☐ Basic Rules and Techniques & Radiation Protection.
- Sources of Radiation and their Characteristics.
- Shielding, Radiation Detectors & Biological Effects.

#### MODULE 2: FILM DEVELOPMENT

- ☐ Film Radiography
- □ Film Processing
- Procedures and Inspection Techniques

MODULE 3: TECHNICS IN RADIOGRAPHY

MODULE 4: NON-CONVENTIONAL RADIOGRAPHY

MODULE 5: SENSITIVITY AND DEFINITION.

- □ I.Q.I's
- Other Accessories.

MODULE 6: INTERPRETATION OF RADIOGRAPHS

- Types of discuntinuties
- Manufacturing Process and Discuntinuties

MODULE 7: CODES, STANDARDS & PROCEDURES.

## **PRACTICALS**

- ☐ Radiography of Welds using X-Ray & Gamma Ray
- Interpretation
- Evaluation of Radiographs
- Recording of Test Results
- Reporting Results



#### Course Duration:

Level - 1: 40 hrs.

Level - II: 40 hrs.

Examinations:

Paper - I : General

Paper - II : Specific

Paper - III: Practicals

Candidates must score a minimum of 70 % in each test and a minimum of 80% average for all the three tests.





## SOUTHERN INSPECTION SERVICES (P) LTD

