


DOCUMENT NAME	Course Curriculum					
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ROYAL TECH TRAINING & CONSULTANCY

Method & level	Radiographic interpretation- Dense metal welds – Level 2
Course Duration - Days & Hours	6 DAYS - 56 HOURS
Revision & Updated on	Rev 3- Updated on 17-1-2022

PCN Level 2 Radiographic Interpretation

Duration: 6 Days (56 hours)- minimum

Course Overview:

This course involves minimum 56 hours of training. This course is for NDT candidates wishing to carry out Radiographic film interpretation; this course incorporates interpretation of the Radiograph in addition to the techniques used to create the Radiograph, film processing etc

Course Content:

1. Basics of NDT, classifications of NDT
2. History and physics of Radiography, Properties of X- and gamma-rays
3. Source of X rays, equipment and components, high energy X ray equipment
4. Source of Gamma ray, artificial and natural radio activity, activity, Gamma ray equipment & interaction with matter
5. Attenuation, absorption, HVL, TVL, types of scattering, filters
6. Image formation, quality and principles, parameters of shadow formation , Factors controlling contrast and definition, sensitivity, unsharpness
7. IQI- intensifying screens and classifications, applications
8. Exposure Calculations – relationships- RT Techniques
9. Film processing- chemicals and spurious (artifacts) indications
10. Radiographic indication and interpretation
11. Product technology- welding and its associate defects
12. Inspection & reporting of dense metal welds using RTFI of various types of weld joints
13. Practical exercise and Daily assessment

Course Objectives:

1. understanding the basic theory of X – and gamma radiography
2. selection of film type and energy levels, select and prepare techniques for a given specimen
3. understanding the theory of film processing and associated dark room techniques.
4. To have a working knowledge of basic radiation safety.
5. To plot and evaluate film characteristics
6. To recognize film artifacts and faults
7. Meet the syllabus requirements for PCN Level 2 as per PCN GEN Appendix C2

Experience:

6 months experience required in order to gain full qualification.