# ROYAL TECH TRAINING & CONSULTANCY

| | |
|---|---|
| Method & level | Radiographic interpretation- Dense metal welds – Level 2 |
| Minimum Course Duration - Days & Hours | 7 DAYS - 56 HOURS |
| Revision & Updated on | Rev 6- Updated on 22-4-2026 |

**Prerequisite Mandatory Product Technology Course**

Please be informed that PCN has introduced a new requirement for all first-time PCN aspirants. Effective from 1st November 2025, candidates must complete an online Product Technology Training before registering for any PCN course at an approved institute.

The mandatory Product Technology Training Course being introduced exceeds these 'basic prior knowledge' requirements and all students (at whatever level) are required to complete this Product Technology training in advance of attending their first BINDT ATO-approved training course.

This also applies to Level 3 bespoke training where the applicant does not hold a valid ISO 9712 certificate. This training course need only be completed once. Valid ISO 9712 certificates are those recognised by BINDT and as listed in ICNDT OP19 – MRA Schedule 2 and/or European Federation for Non-Destructive Testing (EFNDT)
MRA Schedule 2.

If you have already completed this course, please reply with a copy of your certificate. If you have not yet completed it, please follow the instructions below:

**Key Points to Note**:

- Training Access: https://wcet-online-training.bindt.org/ (Step-by-step registration guidance is attached).
- A fee of **£60 + VAT** (charged by BINDT) is payable online and is valid for **365 days**.
- Duration: The 24-hour course can be completed online at your convenience.
- Upon payment, you will gain access to course materials consisting of **three modules**: -
  **Module 1:** Industrial Materials –
  **Module 2:** Manufacturing Processes –
  **Module 3:** Introduction to NDT *(Total course duration: approximately 24 hours)*
- A **minimum passing score of 80%** is required.
- Each candidate will have **three attempts** to achieve the passing score.
- Certification: Upon passing, you will receive a Course Completion Certificate, which is mandatory for your registration.
- We encourage all new aspirants to complete this training at the earliest to avoid any delay in the registration process.
- Should you have any questions, please feel free to contact the **Royal Tech team** for assistance.
- Once Product Technology Certificate received, we will proceed with your enrolment for any Level course

# PCN Level 2 Radiographic Interpretation

**Duration:** 8 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 PCN24/ GEN Appendix Z1 &PCN PCN24/GEN/APP/RT & PCN24/AQB/REQ/RT

**Experience:**

90 days experience required in order to gain full qualification.