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ROYAL TECH TRAINING & CONSULTANCY

Method & level	Magnetic Particle Testing (Multi sector) – Level 1 & 2
Minimum Course Duration - Days & Hours	5 DAYS - 35 HOURS
Revision & updated on	Rev 6- Updated on 22-4-26

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

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PCN Level 2 Magnetic Particle Inspection

Duration: 5 days (35 Hours) min duration

Course Overview:

This course provides comprehensive knowledge of the theory and practice of magnetic particle testing for candidates to reach the Level 2 standard. You will learn to explain the basic principles of magnetic particle inspection methods, to carry out magnetic particle inspection & to write clear and concise inspection instructions and test reports.

Course Content:

1. Basics of NDT, classifications of NDT
2. History and Principles of magnetism, Classification of materials,
3. Electromagnetic induction, Magnetic Parameters, properties (Permeability and reluctance and many more)
4. Currents, Methods of Magnetization and field distribution
5. Demagnetization, techniques & field measurements, devices
6. Medium, properties and classification
7. Equipment's, accessories, and its applications
8. Quality control check
9. Inspection Techniques- Methods -Applications- -Magnetic field requirement (as per BS EN-9934-1)
10. Special techniques
11. Indication interpretation & recording techniques
12. Product technology- welding, casting, forging, wrought and its associate defects
13. Inspection & reporting of welds, casting, forgings using various magnetisation techniques using visible, fluorescent particles of various types of products
14. Practical exercise and Daily assessment

Course objectives:

1. Understand the basic principles of magnetic particle inspection
2. Understanding Electromagnetic induction, Magnetic Parameters, properties
3. Understanding the methods of magnetization, technique selections, chemicals, equipment's
4. Carry out Magnetic Particle Inspection on welds, casting, wrought using a range of magnetizing methods
5. Guidelines for written instruction, codes, and test reports
6. Meet the syllabus requirements for PCN Level 2 as per PCN24/ GEN Appendix Z1 & PCN24/GEN/APP/MT & PCN24/AQB/REQ/MT

Experience:

- With level 1- 45 days, Direct access- 60 days
- Note: . One-day duration is at least seven hours, which can be achieved on a single day or by accumulating hours. The maximum allowable hours in any one day is 12 hours. Experience in days is achieved by dividing the total accumulated hours by 7.
- Refer PCN24- GEN (latest issue for experience requirement), PCN 24-PSL 30 and RT-FM-A-03 - JOINING INSTRUCTIONS- (latest) for Training duration, experience requirement.