

Who we are?

TIW is an NDT training & service provider organization located in Trichy, India providing complete solution for NDT training & inspection

We conduct training for PCN Level I, II & III in the following methods

- PCN – Phased Array Ultrasonic Testing (PAUT)
- PCN- Time of Flight Diffraction (ToFD)
- PCN - Ultrasonic Testing 3.1 & 3.2
- PCN UT – 3.8 & 3.9 (Nozzles & Node)
- PCN - Magnetic Particle Testing (only Level I & II)
- PCN - Liquid/dye Penetrant Testing (only Level I & II)
- PCN - Radiographic Film Interpretation (only Level II)

How to Book Your Training Course

To book a training course, simply call [+91 9043322221](tel:+919043322221) and we will be happy to discuss your requirements with you. If necessary, we can provide advice on which type of training and certification is appropriate for you or your company. Enquiries may also be made via email to admin@tiw.co.in or by visiting us on the web at www.tiw.co.in

On confirmation of the booking, we will send to you an application form which must be completed and returned to us in order to confirm the booking process. Training courses will be conducted on a weekly basis at our Trichy Training and Examination Centre

Contact Us

TRICHY INSTITUTE FOR WELDING

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Radiographic Film Interpretation Course Curriculum

What is Radiographic Testing?

Radiography Testing is one of the NDT method in which the test-part is placed between the radiation source and film (or detector). The material density and thickness differences of the test-part will attenuate (i.e., reduce) the penetrating radiation through interaction processes involving scattering and/or absorption. The differences in absorption are then recorded on film(s) or through an electronic means. In industrial radiography there are several imaging methods available, techniques to display the final image, i.e., Film Radiography, Real Time Radiography (RTR), Computed Tomography (CT), Digital Radiography (DR), and Computed Radiography (CR). The Radiographic Interpretation course only covers the interpretation of the radiograph, therefore is suitable for personnel wishing to only interpret radiographs as opposed to creating radiographs via Radiographic testing.

About the course

PCN Level 2

This course is designed to provide the participants, a better understanding about theory and application of radiographic testing in welds and how to interpret and report radiograph taken on dense metals and to train them and qualify them as PCN II in Radiographic Film Interpretation.

Qualification Requirements

Training Hours & Experience

Training Hours	Experience
56 Hrs	6 months

Documents to be submitted for Examination

- PSL 57-A Initial Examination application
- PSL 30- Log of Experience
- PSL 44-Vision Requirements (which has to be certified by a registered medical practitioner)
- CP-27 code of ethics
- PCN ID (wallet or e-certificate) -only for existing PCN certificate holders
- One govt approved identity card (example: Passport/voter ID /Aadhaar Card)

Course Content

PCN Level 2

- ❖ Introduction to NDT, Classification of methods
- ❖ History and Physics of radiography
- ❖ Sources of Radiation- X rays- X-ray Equipments, High energy X rays
- ❖ Gamma ray, isotopes, camera, interaction of matter with Radiation
- ❖ Attenuation- HVL, TVL, control of scattering
Image formation, Radiography Image quality, Sensitivity, contrast etc
- ❖ IQI- intensifying screens
- ❖ Exposure Calculations- Exposure Charts
- ❖ Film – film processing
- ❖ Interpretation- RT films
- ❖ Understanding of codes
- ❖ Welding technology- major weld process SMAW, SAW, TIG, MIG, FCAW etc

Learning Outcomes

PCN Level 2

Successful candidate will be able to

- ❖ Understand the basic principles of the radiographic inspection procedure, understand the radiographic film processing, procedures, recognize limitations in exposure quality and understand potential causes of processing artifacts
- ❖ Assess radiographic quality and understand viewing condition requirements
- ❖ Interpret radiographic codes and specifications and write reports based on code requirements
- ❖ Understand origins of defects and locate and recognize radiographic images of defects with a high probability of detection

What to bring?

- ❖ Scientific calculator
- ❖ Safety boots are mandatory in practical areas
- ❖ PCN Candidates: PCN wallet card or other form of photographic identification

Special Note

- ❖ TIW reserves the right to disqualify the participants from certification program when the personnel is found that they he/she shall not meet the PCN requirements
- ❖ Participants are not allowed to use their own equipment / laptop during the training and examination. TIW provides candidate with ultrasonic Flaw detector for practical inspection and other accessories needed for practical.
- ❖ Follow professional dress code during the entire training and examination.
- ❖ Once when enrolled for course, TIW customer care people will send joining instructions through mail and enough information shall be communicated through telephonic call.

Other information about Training & Examination

Training program comprises of daily assessment after completion of each chapter and the participants are required to get above 70% marks. Based on daily assessment exams, candidate is awarded with successful completion of training.

Then the participants are required to undergo examination which consists of specific and practical examination. Candidate has to obtain a minimum of 70% in each examination to get certified as level 2.

This certificate is valid for 5 years from the date of certification. The certificate has to be renewed as per PCN requirements.