



International Finishing Trades Institute (iFTI)

FTI 2002C SSPC Protective Coatings Inspector (PCI) (CERTIFICATION)

Course Information

Course Hours: 48

Course Description: This course will thoroughly train individuals in the proper methods of inspecting surface preparation and installation of industrial and marine protective coatings and lining systems on an array of industrial structures and facilities.

The program's primary objective will be to train IUPAT instructors in the proper methods of inspecting surface preparation and installation of industrial and marine protective coatings and lining systems on an array of industrial structures and facilities, so that they can become a certified Protective Coatings Inspector. There are no prerequisites to attend the PCI course; however, candidates should possess a minimum of three (3) years coating application experience and be prepared for an intense and fast-paced week of training with evening homework and study, in order to cover an extensive amount of information in six (6) days. For additional information visit www.sspc.org/training/pci.html (Certification Period: 48 months).

Course Objectives:

- Describe the common duties, responsibilities and the role of an industrial coatings inspector.
- Describe the authority of a coatings inspector.
- Explain the importance of thorough documentation.
- Identify the elements of a corrosion cell.
- Describe the corrosion of metal surfaces.
- Explain how industrial coatings control corrosion.
- Describe alternative methods used to protect carbon steel from corrosion.
- Describe the differences between quality assurance and quality control.
- Describe the common duties of quality assurance and quality control personnel.
- Describe the purpose and content of a pre-job or preconstruction conference.
- Explain the purpose of an inspection procedure/plan.
- Explain the importance of inspection personnel.
- Describe the importance of proper surface preparation.
- Explain the dual objective of surface preparation.
- Define the SSPC standards for surface preparation.
- Describe common methods used to prepare surfaces for coating.
- Describe methods used to control an environment during surface preparation activities.
- Measure and record surface profile.
- Evaluate surface cleanliness.
- Apply practical arithmetic to coatings inspection.
- Describe the procedures associated with proper mixing, thinning, and application of industrial coatings.
- Define the SSPC standards for coating application.
- Describe the role of the coating manufacturer on a coatings project.

- Use MSDS and product data sheets to verify safe and proper mixing, thinning and application of coatings.
- Describe the inspector's role regarding coating material receipt and storage.
- Measure and record ambient conditions and surface temperature.
- Calculate wet film thickness.
- Measure wet film thickness.
- Verify the currency of calibration and assess the accuracy of nondestructive coating thickness gages.
- Measure coating thickness using nondestructive gages.
- Describe the SSPC standard for measurement of coating thickness (SSPC-PA2).
- Measure coating thickness using destructive methods.
- Detect pinholes and holidays.
- Measure coating adhesion.
- Evaluate coating cure.
- Measure coating hardness.
- Identify common coating defects.
- Describe methods used to verify intercoat cleanliness.
- Identify basic differences between house paint and industrial protective coatings.
- List volatile and non-volatile components of a coating.
- Describe the functions of the resin, additives, pigments and solvents in a coating.
- Describe methods by which coatings cure.
- Describe the procedures used to identify service environments.
- List advantages and limitations of various generic types of industrial coatings.
- Describe functions of the primer, mid-coat and finish coat.
- Identify common coating systems used by various industries.
- Describe methods used to evaluate coating performance prior to full scale installation.
- Describe the special inspection procedures associated with shop painting, powder coatings, thermal spray coatings, and duplex coating systems.
- Describe the unique aspects of performing coatings inspection on an overcoating project.
- Describe the inspector's role on projects involving disturbance of coatings containing toxic metals.
- Describe how coatings inspection can help prevent premature coating failure.

Prerequisite/s: None

Instructor



Course Lead: Jim McAlister

Resume Link: <https://iftilms.org/faculty/jim-mcalister/>

Policies and Procedures

COE Accreditation

The International Finishing Trades Institute (iFTI) is [accredited](#) by the Commission of the Council on Occupational Education (COE) and is entitled to the recognition and associated privileges of this designation. Accreditation is a status granted to an educational institution or program that has been found to meet or exceed stated criteria of educational quality and student achievement. Accreditation by COE is viewed as a nationally-honored seal of excellence for occupational education institutions and denotes honesty and integrity.



iFTI Course Catalog

For a complete list of iFTI course offerings, please refer to the [iFTI Course Catalog](#).

Diversity Statement

The iFTI champions [diversity in the workplace](#) and committed in building an inclusive culture. We believe that every person, regardless of attributes such as race, gender or sexual orientation, has an equal opportunity to find employment based on merit or while in training or the workplace. Although our union is more diverse than ever, we still have so much work to do.

Policies and Procedures

The campus policies and procedures are found in the [Student Handbook](#).

Travel and Lodging Reservations

Upon the receipt of the final class registration confirmation and course schedule, you will be advised to call Metropolitan Travel Service to obtain the best coach fare ticket. No air travel costs will be reimbursed if not made through Metropolitan Travel.

If you will be driving to the event, send your anticipated arrival and departure dates and times, so appropriate hotel reservations can be made. Hotel reservations will be made on your behalf after the iFTI receives your final travel itinerary.

Travel and lodging reservations will be direct billed to the iFTI. If regionally appropriate for you to drive your vehicle, the iFTI will reimburse mileage at \$.30/mile (not to exceed the lowest 30-day advance airfare, or the shortest route as determined by Google Maps). iFTI is not financially responsible for any costs associated with travel, lodging, meals or incidentals for accompanying guest(s).

In the event you must cancel, the iFTI and Metropolitan Travel Service must be notified within 7 days of the travel date or the District Council/Local Union will be responsible for any cancellation fees.

Dress Code

The dress code for iFTI classes in Hanover, Maryland is casual. Clothing should be neat, clean, and well-kept. Please no shorts, flip flops, sleeveless shirts, worn tennis shoes, sweatpants, sweatshirts, jeans with holes, rips, tears or any clothing that contains inappropriate language or that could be offensive. If you will be delivering a presentation / teach back, please dress in a professional manner.

Please call the iFTI at 410.564.5850 with any questions or concerns.