



Best Technology Solutions (BTS)



Coating Inspector Program CIP Level (1 & 2) - Training program

Introduction:

For over 30 years, the NACE Coating Inspector Program has set the standard for inspections in the protective coatings industry and is the world's most recognized coating inspector certification program. CIP is the first international certification program designed to improve the overall quality of inspections performed, and it continues to provide the most complete training curriculum, producing top-notch inspectors for the industry

This course offers instruction on the technical and practical fundamentals of coating inspection work for structural steel projects. This course provides the candidates with knowledge of coating materials and techniques for surface preparation and application that prepares the student to perform basic coating inspections using non-destructive techniques and inspection instrumentation.

This course focuses on advanced inspection techniques and specialized application methods for both steel and non-steel substrates, including concrete using both nondestructive and destructive techniques. Surface preparation, coating types, inspection criteria, lab testing, and failure modes for various coatings, including specialized coatings and linings are also covered.



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Who Should Attend?

Coating inspector trainees, anyone interested in gaining a better understanding of coatings application and inspection including project engineers, quality assurance managers, contractors, technical sales representatives, blasters, paint applicators, and maintenance personnel, anyone interested in becoming NACE Coating Inspector Level 2

Course Objectives:

By the end of this course delegates will learn about:

- Recognize coating types and curing mechanisms
- Understand coating specifications including service environments and coating life cycle
- Understand surface preparation equipment, methods and standards for abrasive blasting, solvent cleaning and power and manual tool cleaning
- Apply coating by brush, roller, mitt, and conventional and airless spray
- Perform inspection procedures and the role of the inspector including safety, ethics and conflict prevention and decision making
- Test for environmental or ambient conditions and nonvisible contaminants
- Utilize non-destructive test instruments such as wet-film and dry-film thickness gauges and low and high voltage holiday detectors



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- Measure surface profile using replica tape and anvil micrometers, surface profile comparators and digital surface profile gauges
- Identify quality control issues, recognizing design and fabrication defects and coating failure modes
- Use Material Safety Data Sheets (MSDS) and product technical data sheets
- Log and document data
- Understand the advanced corrosion theory
- Understand environmental controls and advanced environmental testing
- Identify centrifugal blast cleaning and water jetting equipment, standards, methods of use and inspection concerns
- Recognize the importance of surface preparation, application and inspection of liquid-applied and thick barrier linings
- Use specialized application equipment including plural-component, electrostatic and centrifugal, and hot spray systems
- Understand concrete coatings
- Identify specialized coating techniques and application of non-liquid coatings
- Distinguish coating survey techniques and procedures and common coating failure modes



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Course Outline:

- Use of protective coatings to control corrosion
- Corrosion fundamentals such as properties of a coating, coating classification and modes of protection
- Coating types and curing mechanisms
- Coating specifications including service environments and coating life cycle
- Surface preparation equipment, methods and standards for abrasive blasting, solvent cleaning and power and manual tool cleaning
- Coating application by brush, roller, mitt, and conventional and airless spray
- Role and responsibilities of the inspector including safety, ethics, and conflict prevention and decision making
- Inspection procedures and quality control
- Purpose and content of a pre-job conference
- Test instruments for measurement of environmental or ambient conditions
- Non-destructive test instruments
- Testing for non-visible contaminants
- Quality control issues, recognizing design and fabrication defects and coating failure modes



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- Material safety data sheets (MSDS) and product technical data sheets
- Purpose and content of log book and report documentation
- Advanced corrosion theory
- Environmental controls and advanced environmental testing
- Centrifugal blast cleaning and water jetting equipment, standards, methods of use and inspection concerns
- Advanced nondestructive and destructive test instruments
- Surface preparation, application and inspection of liquid-applied and thick barrier linings
- Specialized application equipment including plural-component, electrostatic and centrifugal and hot spray systems
- Concrete coatings
- Specialized coating techniques and application of non-liquid coatings
- Coating survey techniques and procedures and common coating failure modes