



**RP2D Crane Inspector Course
Supplemental Evaluation Criteria
INSTRUCTOR-LED**



Revision 0, 07-08-09

1.0 Course Content

- 1.1 Course content shall include the following information from API Spec 2C Offshore Pedestal Mounted Cranes as appropriate for the type of crane used:
- a) Load charts/Information charts
 - b) Proper configuration of the crane to the loads
 - c) Loads' changes
 - d) API Spec 2C definitions
 - e) Crane rating in relationship to the load
 - f) Crane personnel rating, personnel hoist systems, tagging requirements
 - g) Difference between fixed & floating platforms using diagrams
 - h) Overview of effects of loads on stowed, non-stowed, and out-of- service conditions
 - i) Overview of effects of wind/ ice/ seismic load
 - j) Importance of following manufacturer's recommendations for hydraulic, electric, and mechanical (friction) categories of cranes
 - k) Safety factors involved
 - l) Sheave specification requirements
 - m) Load block assemblies/auxiliary ball specification requirements
 - n) Boom hoist, load hoist, and telescoping boom mechanisms' specification requirements
 - o) Swing mechanisms/ locks/ breaks specification requirements (except Design and Material Properties topics)
 - p) Mounting of critical components (e.g. pins, bolts, etc.)
 - q) Power plant
- 1.2. Course content shall include the entire body of information contained within API RP-2D Operation & Maintenance of Offshore Cranes (including Appendices).
- 1.3. Course content shall familiarize students with typical problems encountered in crane maintenance and troubleshooting including:
- a) Operational problems and likely trouble points
 - b) Basic schematic symbols
 - c) Basic hydraulic, mechanical & electric circuits troubleshooting
 - d) Basic safety systems
- 1.4 Course content shall describe typical records that must be maintained, including the following:
- a) Certifications for each wire rope
 - b) Crane inspection records to ensure that past inspections were appropriate for the type of crane usage

NOTE: Cranes manufactured or installed after March 17th, 2003 must have records on meeting API 2C Monogram or equivalent requirements.



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- 1.5 Course content shall describe environmental hazards associated with:
 - a) Fluid containment
 - b) Housekeeping
- 1.6 Course content shall address the requirements of MMS crane related PINC List (Potential Incidents of Non-Compliance).

2.0 Simulations & Practical Exercises

- 2.1. A pedestal crane must be used for practical exercises and testing.
- 2.2 Practical exercises shall include the instructions on the proper usage of measuring and testing tools, as specified in relevant Recommended Practices.
- 2.3 Practical Exercises shall include identification of stress, corrosion and inspection practices.
- 2.4 The training provider shall maintain a documented requirement for a minimum of eight (8) various hands-on exercises conducted in each course.

3.0 Examinations

- 3.1 The training provider shall maintain a documented procedure requiring having a written examination at the conclusion of the course. The written examination shall contain a minimum of 100 questions, including at least 50% of the questions on the inspection of critical components
- 3.2 The training provider shall maintain a documented procedure requiring that the passing score on the written examination is at least 75%. This information shall be communicated to students before examination begins.
- 3.3 The training provider shall maintain a documented procedure requiring a review of all the missed portions of the written examination following the exam completion.
- 3.4 The training provider shall maintain a documented procedure allowing students who fail the examination to take one retest using a different version of the examination. Failure of a retest shall require that the student retake the entire course.



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4.0 Practical Evaluation

- 4.1 The training provider shall maintain a documented procedure requiring a practical examination with a minimum of 8 (eight) various hands-on exercises centered on critical components, including any of the following:
- a) Tear down and troubleshoot hoist & winches
 - b) Inspect ball rings
 - c) Emergency lowering of loads
 - d) Crane safety systems
 - e) Emergency Shut Down (ESD)
 - f) Wire rope
 - g) Prime mover
 - h) Boom inspection
 - i) Hoist break test
 - j) Sheave
 - k) Inspection of hydraulic system
- 4.2 The training provider shall maintain a documented procedure requiring a passing score of 90% for the hands-on examination. Students shall be informed of this requirement before the practical examination begins. The procedure shall also include a requirement for retraining/remediation covering missed portions of the hands-on examination immediately after exam completion.

5.0 Course Structure

- 5.1 The training provider shall establish a procedure requiring the course duration of a minimum of 40 hours, including instruction and evaluation portions.
- 5.2 The training provider shall establish a procedure limiting the number of students per course at ten or fewer.
- 5.3 The training provider shall establish a procedure to verify students minimum qualification requirements (course prerequisites) prior to the accepting a student into a course. Such prerequisite must, at a minimum, include a completion of a crane operator & rigger course within the last four years.