



M&A Safety Services

512 Viaulet Road
Youngsville, Louisiana 70592
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www.masafetyservices.com

Rigging Safety – 8 Hour (API RP 2D 7th Edition) Course Outline

Prerequisites: This course shall have no formal pre-requisite. The individual should have no history of a disabling medical condition, which may be sufficient reason for disqualification.

Course Length: 6-8 hours – Course length shall vary depending on the number of delegates. Total course time includes breaks and meals.

Class Size: The maximum number of delegates that may be trained and tested per instructor shall be twenty four (24) in the classroom session and twenty (20) in the practical session. A second instructor shall be added for the practical session once the participation exceeds twenty (20) and exercises will be divided into groups.

Course Objective

-) Provide delegates assigned to rigging duties the necessary skills to safely perform their jobs.
-) Provide delegates with recommended practices and guidelines to perform safely while working with cranes.
-) Delegates should be able to demonstrate these necessary skills during practical examination and demonstrate knowledge during written examination.

Course Design

-) Power Point© / Lecture / Audio Video / Visual Aids
-) Demonstrations
-) Practical Exercises

Successful Course Completion

-) Requires a minimum score of 75% or better.
-) Grades shall be calculated by dividing the number of questions answered correctly by the total number of exam questions.
-) Delegates will have no more than thirty (30) minutes to complete the exam.
-) Successful completion of practical session is mandatory.

Course Content Summary

-) Classroom
-) Practicals

Breaks: 10 minutes (approximately every hour)



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Lunch: 1 Hour

Course Outline

Rigging Requirements

-) Qualified Rigger – API RP 2D Definition
-) Rigger Responsibilities
-) Manufacturer Responsibilities
-) Common Rigging Problems

Rigging Equipment

-) Definition & Terminology
-) Blocks & Sheaves
 - o Inspection Criteria
 - o Typical Block Components
 - o Proper/Improper Use
-) Wedge Sockets
 - o Installation and Inspection Criteria
-) Hooks, Latches
 - o Different Types
 - o Inspection Criteria
 - o Proper/Improper Use
-) Shackles
 - o Different Types
 - o Inspection Criteria
 - o Proper/Improper Use
-) Slings
 - o Different Types
 - o Inspection Criteria
 - o Characteristics
 - o Proper/Improper Use
-) Rings, Links, Swings
 - o Different Types
 - o Characteristics
-) Turnbuckles
 - o Different Types
 - o Inspection Criteria
-) Spreader and Equalizer Beams
-) Cable Clips
-) Pad eyes, Eyebolts, and Other Lifting Equipment
-) Load Binding Equipment
 - o Ratchet Binders



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- Lever Binders
 - Ratchet Straps
 - Inspection Criteria
 - Potential Hazards
-) Housekeeping and Storage

Rigging Technique

-) 3 Basic Hitches
-) Sling Configuration
-) Sling Angles
-) Rated Load
-) Weight of a Load
-) Center of Gravity
-) Moving the Load
-) Load Control/Taglines
-) Unbinding Loads
-) Pinch Points/Body Positions
-) Load Stability
-) Personnel Transfer
-) Other Factors (Environmental/Electrical)

Rigging Safety

-) Lift Planning
-) Personal Protective Equipment
-) Hand Signals/Communication

Practical Session

Practical training shall utilize a hydraulic crane, various slings, loads & rigging techniques.

Practical shall verify that the delegate is able to complete the following:

-) Select and wear appropriate PPE during practical training
-) Inspect and identify damaged hardware/rigging gear
-) Select the appropriate hardware/rigging gear to complete required lifts
-) Communicate effectively with the crane operator using proper hand signals
-) Use tag lines properly to control loads
-) Select the appropriate rigging techniques to complete the required lifts
-) Use acceptable sling angles to determine safe lifting operations
-) Maintain hand/body position absent from hazards (pinch points)
-) Prevent anyone from standing under a suspended load
-) Work safely with other riggers as a team
-) Store hardware/rigging gear properly following its use



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Training Center Provided Material

-) PPE
-) Crane with Operator
-) Rigging Material

Delegate Requirements

-) Must possess good physical health as the practical training is physical demanding.

Reference Material / Documents

API RP 2D Seventh Edition
OSHA 29 CFR 1926.251
OSHA 29 CFR 1926.753