



M&A Safety Services

512 Viaulet Road
Youngsville, Louisiana 70592
Main: 337-451-4685
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www.masafetyervices.com

Overhead Crane Safety

Course Outline

Prerequisites: This course shall have no formal pre-requisite.

Course Length: 3-4 hours - Course length shall vary depending on the number of delegates. Total course time includes breaks.

Class Size: The maximum number of delegates that may be trained and tested per instructor shall be thirty-five (35) 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).

Course Objective

- Provide delegates assigned to work with or around overhead cranes with the necessary skills to safely perform their jobs.
- Provide delegates with recommended practices and overhead crane regulations.
- Delegates should be able to demonstrate the necessary skills during practical examination and demonstrate knowledge during written examination.

Course Design

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

Successful Course Completion

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

Course Content Summary

- Classroom
- Practical's

Breaks: 10 minutes (approximately every hour)

Lunch: 1 Hour (if applicable)



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Course Outline

About Overhead Cranes

- Requirements
- Overhead Crane Applications
- Responsibilities
 - Management
 - Employees
- Common Crane Hazards
- Overhead Crane Capacity

Overhead Crane Inspection Requirements

- Daily or Pre-use Inspection
- Monthly Inspection
- Annual
- Required Documentation

Overhead Crane Operations

- General Operating Requirements
- Attaching the Load
- Moving the Load
- Hoist Safety

Rigging Equipment Summary

- Common Types of Slings
- Sling Inspection/Characteristics
 - Wire Rope
 - Synthetic Web
 - Polyester Round
 - Chain

Rigging Technique Summary

- 3 Basic Hitches
 - Vertical Leg
 - Choker
 - Vertical Basket
- Sling Lifting Capacities (Working Load Limits)

Hand Signals/Communications

- Signal Person Responsibilities
- Review Hand Signals



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Practical Session

Practical training shall utilize an overhead crane, various slings, loads & rigging techniques.

Practical shall verify the following:

- Conduct proper pre-use inspection of crane and rigging gear
- Select the appropriate hardware/rigging gear to complete required lifts
- Effectively controls the crane operations and uses operating indicators
- Accelerate and decelerate crane in a smooth safe manner
- Verifies the load is not swinging prior to landing the load
- Responds to standardized hand signals from signal person
- Verifies slings are properly connected/free before continuing operations
- Keeps the hook clear of riggers while the slings are disconnected
- Ensures overall safety of personnel during crane operations
- Properly stores hardware/rigging gear following its use

Training Center Provided Material

- PPE

Delegate Requirements

- Must possess good physical health as the practical training is physical demanding.
- Overhead Crane with Rigging Gear

Reference Material / Documents

OSHA 29 CFR 1910.179