



M&A Safety Services

512 Viaulet Road
Youngsville, Louisiana 70592
Main: 337-451-4685
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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.
-) 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)

Lunch: 1 Hour (if applicable)



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Course Outline

About Overhead Cranes

-) Requirements
-) Types
-) Video "Overhead Cranes"
-) Responsibilities
 - o Management
 - o Employees
-) Common Crane Hazards
-) Overhead Crane Capacity
-) Warnings
-) Clearance from Obstruction
-) Crane Components
 - o Trolley Stops
 - o Trolley Bumpers

Overhead Crane Inspection Requirements

-) Initial
-) Daily or Pre-use Inspection
-) Inspection Checklist Example
-) Preventative Maintenance
-) Hoist Control
-) Inspection Classifications
 - o Frequent
 - o Periodic
-) Running Rope Inspection
-) Rope Replacement
-) Maintenance

Overhead Crane Operations

-) General Operating Requirements
-) Attaching the Load
-) Moving the Load
-) Hoist Safety
-) Signals/Communications
 -) Review Hand Signals

Rigging Equipment Summary

-) Common Types of Slings
-) Sling Inspection/Characteristics
 - o Wire Rope



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- Synthetic Web
- Polyester Round
- Chain

Rigging Technique Summary

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

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 control the crane operations and uses operating indicators
-) Accelerate and decelerate crane in a smooth safe manner
-) Verify the load is not swinging prior to landing the load
-) Respond to standardized hand signals from signal person
-) Verify slings are properly connected/free before continuing operations
-) Keep the hook clear of riggers while the slings are disconnected
-) Ensure overall safety of personnel during crane operations
-) Properly store 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