



OVERHEAD CRANE OPERATER SAFETY COURSE

COURSE OUTLINE

Module ONE : LEGISLATION AND REGULATION

Time Allocation: 20 Mins

Module Terminal objectives:

Upon completion of the module, the participants should be able to:

- Know OSHA rule and regulation. (knowledge)
- Know the recommended Practice for Operation and Maintenance of Overhead Cranes. (Knowledge)
- Know the provision and use of Work Equipment Regulations (Knowledge)
- Know the Lifting Operations and Lifting Equipment Regulations (Skill)

Module Enabling Objective(s):

Upon completion of the module, the participants should be able to:

- Demonstrate the knowledge of all legislation and regulation from OSHA, API, PUWER and LOLER.

Delivery Methods:

- Lecture Format



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Module TWO : ROLE AND RESPONSIBILITIES

Time Allocation: 25 Mins

Module Terminal objectives:

Upon completion of the module, the participants should be able to:

- Know the roles and responsibilities of Overhead Crane operator. (knowledge)
- Know the flow of Reporting Structure (Knowledge)

Module Enabling Objective(s):

Upon completion of the module, the participants should be able to:

- Know their role and responsibilities, and the structure of command.

Delivery Methods:

- Lecture Format



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Module THREE : BASIC RIGGING & SLINGING

Time Allocation: 60 Mins

Module Terminal objectives:

Upon completion of the module, the participants should be able to:

- Know the type of Lifting Equipment. (knowledge)
- Know the lifting Tackles Inspection and rejection Criteria. (Knowledge)
- Know how to do equipment inspection (Skill)
- Know the basic terminology of Crane Operation
- Know the Loose Lifting Tackles Colour Code
- Know the basic arithmetic and determine of weight.
- Know where to find the Centre of gravity of a load.

Module Enabling Objective(s):

Upon completion of the module, the participants should be able to:

- Know how to inspect and able to reject default equipment.
- Know how to calculation and methods for safely doing lifting operation.

Delivery Methods:

- Lecture Format
- Classroom activities



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Module FOUR : Overhead CRANE

Time Allocation: 35 Mins

Module Terminal objectives:

Upon completion of the module, the participants should be able to:

- Know the type of Overhead Crane. (knowledge)
- Know the safety procedure of operating an Overhead Crane. (Knowledge)
- Know how to do crane maintenance (Skill)
- Know what is and how to operate Ingersoll Rand Winch.

Module Enabling Objective(s):

Upon completion of the module, the participants should be able to:

- Know the type and the knowledge of operating an Overhad crane safety.
- Do crane Inspection checklist

Delivery Methods:

- Lecture Format



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Module FIVE : OVERHEAD CRANE PARTS AND COMPONENTS

Time Allocation: 20 Mins

Module Terminal objectives:

Upon completion of the module, the participants should be able to:

- Know every parts and components of an Overhead CRANE

Module Enabling Objective(s):

Upon completion of the module, the participants should be able to:

- Know parts and components of an Overhead CRANE in order to do lifting activities and do routine maintenance.

Delivery Methods:

- Lecture Format



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Module SIX : CRANE SAFETY DEVICES

Time Allocation: 20 Mins

Module Terminal objectives:

Upon completion of the module, the participants should be able to:

- Know the required safety device of an Overhead Crane.

Module Enabling Objective(s):

Upon completion of the module, the participants should be able to:

- Know all the safety device installed on an Overhead Crane

Delivery Methods:

- Lecture Format



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Module SEVEN : CRANE LOAD CHART

Time Allocation: 20 Mins

Module Terminal objectives:

Upon completion of the module, the participants should be able to:

- Know crane load chart that contained critical information of the crane lifting capacity at various boom length configuration and working radius.

Module Enabling Objective(s):

Upon completion of the module, the participants should be able to:

- Know how to calculate crane lifting Load and working radius.

Delivery Methods:

- Lecture Format
- Class Activities



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Module EIGHT : CRANE PRE-USE INSPECTION

Time Allocation: 25 Mins

Module Terminal objectives:

Upon completion of the module, the participants should be able to:

- Know how to do Pre-use inspection on all crane components.
- Detect faulty parts and equipment.

Module Enabling Objective(s):

Upon completion of the module, the participants should be able to:

- Do safety inspection before lifting operation begins.

Delivery Methods:

- Lecture Format



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Module NINE : CRANE WIRE ROPES

Time Allocation: 30 Mins

Module Terminal objectives:

Upon completion of the module, the participants should be able to:

- Know the wire rope terminology.
- Know how to do rope maintenance.
- Know the rejection criteria of faulty ropes.

Module Enabling Objective(s):

Upon completion of the module, the participants should be able to:

- Know the important of rope maintenance
- Know the how to detect faulty ropes to insure safe working environment.

Delivery Methods:

- Lecture Format



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Module TEN : LIFTING OPERATION

Time Allocation: 90 Mins

Module Terminal objectives:

Upon completion of the module, the participants should be able to:

- Know the safety system for working at crane operation site.
- Identify hazards before they occur.
- Plan Lifting activities.

Module Enabling Objective(s):

Upon completion of the module, the participants should be able to:

- Know all the safety and communication system, the rules and limitation of Crane Operation.
- Competent to plan and supervise the specific lifting operation.

Delivery Methods:

- Lecture Format



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Module ELEVEN: HAZARDS ASSOCIATED WITH LIFTING OPERATION

Time Allocation: 60 Mins

Module Terminal objectives:

Upon completion of the module, the participants should be able to:

- Identify which area are the most dangerous.
- Able to reduce damage on tolls, parts and machineries through identifying incorrect used.

Module Enabling Objective(s):

Upon completion of the module, the participants should be able to:

- Work in Crane Operation site safely by knowing which area are the most hazardous
- Used proper installation of parts and equipment to reduce damage and accident.

Delivery Methods:

- Lecture Format



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Module TWELVE : PRACTICAL EXERCISE

Time Allocation: 300 Mins

Module Terminal objectives:

Upon completion of the module, the participants should be able to:

- Rigging Job on the Load to be lifted (Skill)
- Conduct Pre-use Check, Functional Check and Post used inspection/check on an Overhead Crane (Skill)
- Operate Crane Safety (Skill)
- Conduct Tool-box Talk (Skill)
- Operate Overhead Crane and transfer load safely (Skill)
- Know the general Overhead Crane Operation activities.

Module Enabling Objective(s):

Upon completion of the module, the participants should be able to:

- Work in Crane Operation site safely by knowing which area are the most hazardous.
- Do all safety procedure concerning Overhead Crane Operation.

Delivery Methods:

- Practical Format
- Exercise Format