



Excellect 209 (PTY) LTD Trading as

NICORE

Training and Development

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OPERATE OVERHEAD/GANTRY CRANES

US 242976

NQF Level: 02

Credits: 5

COURSE OVERVIEW



PURPOSE OF THE UNIT STANDARD

The person credited with this unit standard is able to understand the functions, safety and suitability of the crane prior to utilization in the freight handling industry. Learners are also able to inspect and record the operational fitness of the components of a crane and be able to access available support systems and emergency services in case of incidents and accidents while operating a overhead/gantry crane.

The qualifying learner is capable of:

- Demonstrating knowledge of the functions of a crane.
- Identifying the safety and suitability of the crane type prior to utilisation.
- Inspecting and recording the operational fitness of the components of a crane.
- Operating an overhead crane in a safe and competent manner.
- Accessing available support systems and emergency services in case of incidents and accidents.

Specific Outcomes and Assessment Criteria:

SPECIFIC OUTCOME 1

Demonstrate knowledge of the functions of a crane.

ASSESSMENT CRITERIA

1. The main functions of Overhead Crane's are explained in terms of manufacturer's specifications.
2. The operation of all major components are explained in terms of their functions.
3. All safety features and warning devices on the crane are identified, and their purposes explained in accordance with manufacturer's specifications.
4. The maximum operating capacities are explained in terms of the designed crane capabilities.
5. Warnings from crane indicators and gauges are explained according to manufacturer's specifications.
6. Corrective actions are described or demonstrated in terms of neutralising warnings received.

SPECIFIC OUTCOME 2

Identify the safety and suitability of the crane type prior to utilisation.

ASSESSMENT CRITERIA

1. Suitability of the crane is identified according to load characteristics, equipment manufacturers' requirements and environmental conditions.
2. Operational capability of lifting equipment is assessed according to correct Safe Work Load of slings.
3. The influence of load/range is explained according to load/range characteristics, manufacturers' requirements an environmental conditions.
4. A pendant controlled overhead crane is operated in accordance with operating specifications.

SPECIFIC OUTCOME 3

Inspect and record the operational fitness of the components of a crane.

ASSESSMENT CRITERIA

1. Pre-operational checks are carried out according to required checklist.
2. Daily and weekly operator maintenance is performed according to the appropriate post-operational checklist and record keeping using a logbook.
3. Checklist is completed according to worksite procedures and corrective action taken if required, ensuring compliance with manufacturer's specifications.
4. Appropriate measures used to rectify and/or prevent basic faults and defects in the mechanical function of the crane are identified according to operational procedures.

SPECIFIC OUTCOME 4

Operate an overhead crane in a safe and competent manner.

ASSESSMENT CRITERIA

1. The purpose and functions of the various controls is explained in accordance with their designed use and manufactures specifications.
2. Controls are used to manoeuvre the crane within manufacturer's specifications to reduce load swings and related safety hazards.
3. Crane performance is monitored and corrective action is taken when necessary and in accordance with manufacturer's manual.
4. Crane is operated without risk of damage, loss to crane, property, or injury to people.
5. Hazards specific to operating an overhead crane are explained and the ways to minimise the hazards are explained in terms of potential damage to crane, property and injury to people.
6. Start-up and shutdown procedures are followed according to manufacturer's manual.
7. Crane is stowed according to manufacturer's and company/works requirements.

SPECIFIC OUTCOME 5

Access available support systems and emergency services in case of incidents and accidents.

ASSESSMENT CRITERIA

1. The most appropriate course of action in relation to the purpose of the various controls is explained in accordance with company procedures.
2. The handling and storage of the load is explained according to safe working practices.