



Excellect 209 (PTY) LTD Trading as

**NICORE**

**Training and Development**

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# **DESCRIBE DIFFERENT CATEGORIES OF LIFTING MACHINES**

US 260779

NQF Level: 03

Credits: 8

## **COURSE OVERVIEW**



## **PURPOSE OF THE UNIT STANDARD**

It is important that learners fully comprehend the environment in which they will be working as lifting machine operators. This involves the acquisition of general knowledge regarding the various lifting machines listed in the National Code of Practice (NCOP) for the Evaluation of Training Providers for Lifting Machine Operators (Government Gazette 27292 - 18 February 2005).

This standard will give the learner a broad understanding of the types and classes of all the lifting machines. In addition, the learner will be able to give a general account of the main components, systems, instrumentation, levers and controls of the lifting machines taken as a whole. In the Unit Standard that addresses the operation of a lifting machine, the aspects of components, systems, instrumentation, levers and controls will be discussed in greater detail, with reference to the specific machine that the learner intends to become competent in and obtain a license to be able to operate it.

Learners credited with this Unit Standard will be capable of:

- Presenting an overview of lifting machines.
- Explaining the various systems of the lifting machines.
- Explaining the instrumentation of lifting machines.
- Explaining the levers, controls and safety devices of lifting machines.
- Inspecting and reporting on lifting machines.

## **Specific Outcomes and Assessment Criteria:**

### **SPECIFIC OUTCOME 1**

Present an overview of lifting machines.

#### **ASSESSMENT CRITERIA**

1. The different types and classes of machines in the lifting machinery environment are identified and described in terms of their main functions and application.
2. The specific functions of the different lifting machines are explained in terms of the full variety of tasks that can be performed using these machines.
3. Specific lifting machines identified for a lifting task are contrasted in terms of their capacities and limitations.

### **SPECIFIC OUTCOME 2**

Explain the various systems of the lifting machines.

#### **ASSESSMENT CRITERIA**

1. The functions of each system is explained in terms of the role played by each system in the operation of the lifting machine.
2. The main features or aspects of each system are described in terms of how they contribute to the system as a whole.
3. The inter-relatedness of all the systems is explained in terms of how they work together to contribute to the holistic operation of the lifting machine.
4. Possible defects in the system are identified in terms of how they impact on the functionality of the lifting machine.

# Describe Different Categories Of Lifting Machines



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## **SPECIFIC OUTCOME 3**

Explain the instrumentation of lifting machines.

### **ASSESSMENT CRITERIA**

1. The types of instrumentation are identified and described in terms of their name and functions.
2. The indications that the instrumentation give to the machine operator are explained in terms of identification of the indication and what action the operator would have to take in the event of an anomaly.
3. Problems regarding the instrumentation are resolved if within the ambit of the operator or referred to senior personnel.

## **SPECIFIC OUTCOME 4**

Explain the levers, controls and safety devices of lifting machines.

### **ASSESSMENT CRITERIA**

1. The types of levers, controls and safety devices are identified and described in terms of the differences between them.
2. The functionality of the levers, controls and safety devices is explained in terms of the lifting machine's effective operation.
3. Methods of maintaining safety during operation are described in terms of the use of controls and warning devices.

## **SPECIFIC OUTCOME 5**

Inspect and report on lifting machines.

### **ASSESSMENT CRITERIA**

1. The inspection process is described using an appropriate checklist for the specific lifting machine under inspection.
2. An inspection is planned and prepared according to the prescribed procedure.
3. Any problems, defects and anomalies are recorded and reported in accordance with workplace procedures.