



Excellect 209 (PTY) LTD Trading as

**NICORE**

**Training and Development**

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# **OPERATE ROUGH TERRAIN/EARTHMOVING/AGRICULT URAL EQUIPMENT**

US 260762

NQF Level: 03

Credits: 11

## **COURSE OVERVIEW**



## **PURPOSE OF THE UNIT STANDARD**

Operating a lifting machine takes place within a regulatory framework that seeks to ensure safety of the operator, the lifting machine and the lifting machine environment. Rough terrain/earthmoving/agricultural equipment is inherently dangerous, hence, their safe operation cannot be overstated. The learner will also acquire the competencies and skills to operate the components, systems and levers to accomplish the task of lifting and handling loads appropriately. The aspects of safety and communication during the lifting operation are covered.

It is important that the learners operate rough terrain/earthmoving/agricultural equipment using the competencies in this Unit Standard and in keeping with the requirements of the National Code of Practice (NCOP) for the Evaluation of Training Providers for Lifting Machine Operators (Government Gazette 27292: 18 February 2005).

Learners credited with this standard will be able to:

- Discuss and apply the regulatory framework for operating rough terrain/earthmoving/agricultural equipment.
- Describe the rough terrain/earthmoving/agricultural equipment to be operated.
- Demonstrate mechanical awareness of the rough terrain/earthmoving/agricultural equipment.
- Inspect the rough terrain/earthmoving/agricultural equipment.
- Handle loads with a rough terrain/earthmoving/agricultural equipment.
- Operate the rough terrain/earthmoving/agricultural equipment.

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

### **SPECIFIC OUTCOME 1**

Discuss and apply the regulatory framework for operating a rough terrain/earthmoving/agricultural equipment.

### **ASSESSMENT CRITERIA**

1. The responsibility of the employer and employees regarding health and safety are explained in terms of the legal obligations on both parties.
2. The importance of the right to information is explained to ensure that health and safety issues are not compromised.
3. The regulations pertaining to personal protective equipment (PPE) are explained and applied to ensure that appropriate precautions are taken in the workplace.
4. The regulation pertaining to stacking is explained and applied to ensure safety of self and others.
5. The regulation pertaining to driven machines are explained and applied to maintain the safety of the lifting machine environment.
6. Fundamental knowledge of the NCOP is applied during the use of lifting machines.
7. The code of practice and safety procedures of the organisation are described to ascertain whether they are in conformity with the regulatory framework for lifting machines.

### **SPECIFIC OUTCOME 2**

Describe the rough terrain/earthmoving/agricultural equipment to be operated.



### ASSESSMENT CRITERIA

1. The rough terrain/earthmoving/agricultural equipment is described to demonstrate detailed knowledge of the different types of lifting machines in a category, if applicable.
2. The functionality of and the context within which the rough terrain/earthmoving/agricultural equipment can be operated are discussed to demonstrate knowledge of the use of this machine at the appropriate level.
3. The limitations, capabilities and capacities of the rough terrain/earthmoving/agricultural equipment are described to ensure that this lifting machine is the most appropriate for the required application.

### SPECIFIC OUTCOME 3

Demonstrate mechanical awareness of the rough terrain/earthmoving/agricultural equipment.

### ASSESSMENT CRITERIA

1. The major components of the rough terrain/earthmoving/agricultural equipment are identified and described in terms of their functions in the operation of the machine.
2. The systems of the rough terrain/earthmoving/agricultural equipment are described in terms of their features, functions and inter-relatedness.
3. The instrumentation of the lifting machine is explained in terms of their functions and what the operator must do in case of a deviation.
4. The operation of the levers, controls and safety devices is explained and monitored in order to maintain safety during operations.
5. The attachment/s of the rough terrain/earthmoving/agricultural equipment is/are used as per manufacturer's instruction and standard operating procedure.

### SPECIFIC OUTCOME 4

Inspect the rough terrain/earthmoving/agricultural equipment.

### ASSESSMENT CRITERIA

1. Pre-start checks are conducted to ensure that machine is safe for operation.
2. The rough terrain/earthmoving/agricultural equipment is started-up according to manufacturer's instructions.
3. Shut down procedures are performed to ensure that machine is serviceable for next operator/shift.
4. The lifting machine is maintained according to manufacturer's instruction and standard operation procedure.
5. Problems are recorded and reported according to standard operating procedure.

### SPECIFIC OUTCOME 5

Handle loads with a rough terrain/earthmoving/agricultural equipment.

### ASSESSMENT CRITERIA

1. The physical properties of a load are identified and described according to criteria.
2. The appropriate attachment for the load type, if applicable, is selected and used as per manufacturer's instructions.
3. Specific loads are handled according to standard operating procedure.
4. The ability to assess the operational capability of the machine is assessed to ensure efficiency and safety.

### SPECIFIC OUTCOME 6

## Operate Rough Terrain/Earthmoving/ Agricultural Equipment



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Operate a rough terrain/earthmoving/agricultural equipment.

### **ASSESSMENT CRITERIA**

1. Principles of operations/leverage are explained and applied to ensure safe and effective lifting operation.
2. Load capacity of the rough terrain/earthmoving/agricultural equipment and its load are determined as per standard operating procedure.
3. Safe operating procedures are complied with to ensure safety of people, machines and the environment.
4. The rough terrain/earthmoving/agricultural equipment is configured if necessary.
5. The machine is operated according to its load capacity.
6. Communication skills are used during the operation of the rough terrain/earthmoving/agricultural equipment.