

<b>Domain</b>	<b>RIGGING</b>	<b>Unit ID: 958</b>
<b>Title:</b>	<b>Lift and move load in suspension using a mobile crane</b>	
<b>Level: 3</b>		<b>Credits:4</b>

### Purpose

This unit standard specifies the competencies required to lift and move load in suspension using mobile crane. It includes identifying and explaining the application of winches, preparing to lift and/or move the complex load, using a winch to lift and move the complex load and maintaining, caring and storing equipment. This unit standard is intended for those who work in lifting machine operations environment.

### Special Notes

1. Entry information:  
Prerequisite:
  - 937 - *Apply safety rules and regulations in lifting machine operations or demonstrated equivalent knowledge and skills.*
2. For the purpose of learning and assessment, in suspension methods include the use of lifting machinery and equipment( chain blocks, lever hoists, air hoist, winches, derricks, slings, rope, shackles, eye bolts, spreader and equalising beams, clamps, pulley systems, pull lifts, jacks, sliding shoes, rollers, tiffors) and may include various type of cranes.
3. Assessment evidence may be collected from a real workplace, or an appropriate simulated realistic environment in which lifting machine operations are carried out.
4. All inspection, operation and maintenance procedures associated with the use of tools and equipment shall comply with manufacturers' specifications, guidelines and instructions.
5. Regulations and legislation relevant to this unit standard include the following:
  - Labour Act, No. 11, 2007
  - Regulations relating to the Health and Safety of employees at work, 1997 and all subsequent amendment.

### Quality Assurance Requirements

This unit standard and others within this subfield may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available

from the Namibia Qualifications Authority and the Namibia Training Authority on [www.nta.com.na](http://www.nta.com.na).

## **Elements and Performance Criteria**

### **Element 1: Identify, discuss and explain the application of mobile cranes with loads in suspension**

#### **Range**

Methods and techniques may include but are not limited to methods and techniques are related to the type of load and advantages and disadvantages of one method or technique over the other.

#### **Performance Criteria**

- 1.1 The concept of "loads in suspension" is explained
- 1.2 Lifting and moving a load in suspension scenarios, methods and techniques are explained, and their purpose is discussed in terms of safety legislation and work-site practice.
- 1.3 The hazards related to lifting and moving a load in suspension, is discussed and explained.
- 1.4 Terms and definitions used are consistent with generally accepted mechanical handling terminology.
- 1.5 Communication techniques during lifting and moving the load, are explained in terms of generally accepted industry practice.

### **Element 2: Plan and prepare to lift and move the load (in suspension)**

#### **Range**

Resources may include mechanical handling equipment, support materials, applicable documentation and personal protective equipment.

#### **Performance Criteria**

- 2.1 The planning and preparation for lifting and moving the load in suspension, is explained in accordance with work instructions.
- 2.2 Lifting equipment and resources are correct for the task, available on site by the agreed time, and checked for serviceability in line with regulatory and worksite practices.
- 2.3 Working space is cleared, potential obstructions are removed and personnel are notified, prior to the lifting and in suspension task.

- 2.4 Pre-operational checks are carried out on lifting equipment and tackle, in line with work instructions.

### **Element 3: Lift and move the load (in suspension)**

#### **Range**

The learner is required to demonstrate competence in lifting, positioning and securing objects while in suspension.

Objects to be lifted may include but is not limited to structural steel, timber, pre-cast concrete or other similar materials and machinery and machine components which are commonly handled within a variety of industrial environments.

Safe working practices include but are not limited to site access, communication and signalling methods, and centre of gravity of load.

For the purpose of assessment, work instructions may consist of an assessment exercise which may include a work instruction or jobbing sheet, and/or work drawings and permit conditions.

#### **Performance Criteria**

- 3.1 Lifting equipment and tackle is used in line with manufacturers' specifications and standard work-site practice.
- 3.2 Safety precautions are applied and adhered to, in accordance with applicable legislation.
- 3.3 Personnel are allocated to specific positions in order to lift and float the load safely.
- 3.4 The load is inspected for damage and its final position conforms to work instructions as reflected on drawing or job requirement.

### **Element 4: Maintain, care and store equipment**

#### **Range**

Recording of information depends on the applicable work-site practice and may vary according to specific industry sectors.

#### **Performance Criteria**

- 4.1 Lifting equipment is cleaned and stored in line with regulatory requirements and worksite practice.
- 4.2 The proper care and storage procedures for lifting equipment are explained in line with work site practices.

- 4.3 Information regarding the use of lifting equipment is recorded in line with regulations and accepted worksite practice.

### **Registration Data**

<b>Subfield:</b>	Lifting, Shifting and Secure Loads
<b>Date first registered:</b>	27 September 2012
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<b>Body responsible for review:</b>	Namibia Training Authority