

**Domain**

**RIGGING**

**Unit ID: 965**

**Title:**

**Replace steelwork in a shaft**

**Level: 3**

**Credits: 3**

### **Purpose**

This unit standard specifies the competencies required to replace steelwork in a shaft. It includes explaining the factors critical to replacing steelwork in a shaft, preparing to replace the steelwork, replacing the steelwork and preparing the shaft for operation and/or production. This unit standard is intended for those who work as general lifting machine operators.

### **Special Notes**

1. Entry information:  
Prerequisite:
  - *937 - Apply safety rules and regulations in lifting machine operations* or demonstrated equivalent knowledge and skills.
2. This unit standard has been designed as part of a progression. It is one of a series of unit standards for learners in the mechanical handling or related engineering environment. The credits allocated to this unit standard also assume that a learner has already learned to lift and move loads, use relevant tools and use oxy-acetylene equipment.
2. All work is performed under constant supervision and according to workplace and workshop manual specifications and occupational health and safety and environmental legislation.
3. Environment contexts under which this unit standard is used include but are not limited to:
  - Manufacturing and engineering (Metals, Plastics, Tyre and Rubber, Electrical Power Generation, Automotive Manufacturing).
  - Chemical and Petrochemical.
  - Mining.
  - Transport (Maritime, Road, Rail and Aviation).
  - Civil Engineering and Construction.
  - Food and Beverages.
  - Other engineering-related industry sectors.
4. Assessment evidence may be collected from a real workplace, or an appropriate simulated realistic environment in which lifting machine operations are carried out.
5. All inspection, operation and maintenance procedures associated with the use of tools and equipment shall comply with manufacturers' specifications, guidelines and instructions.

6. 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: Explain the factors critical to replacing steelwork in a shaft**

#### **Range**

Explanation may include but are not limited to injury to persons, damage to equipment, loss of production time through breakdowns and increased costs.

#### **Performance Criteria**

- 1.1 The explanation of the principle of operation and purpose of the steelwork in a shaft is given in line with specified requirements.
- 1.2 The explanation of the importance of replacing the steelwork in a shaft to achieve healthy, safe production requirements is given in line with specified requirements.
- 1.3 The explanation lists the possible critical workplace hazards that may be encountered while replacing steelwork in a shaft in a particular context. The explanation also describes the risks associated with and the factors contributing to each workplace hazard.
- 1.4 The explanation lists the possible critical work related hazards that may be encountered while replacing steelwork in a shaft in a particular context. The explanation also describes the risks associated with and the factors contributing to each work-related hazard.

## **Element 2: Prepare to replace the steelwork**

### **Range**

Consequences may include but are not limited to those for permission, personal protective equipment, tools, material and equipment, workplace examination, workplace hazards and identifying the steelwork.

### **Performance Criteria**

- 2.1 Permission is obtained and the relevant logbooks are signed in line with specified requirements.
- 2.2 The required personal protective equipment is selected, examined and used in a way that is consistent with its purpose, design and specified requirements.
- 2.3 Tools, material and equipment are selected, examined and transported in line with specified requirements.
- 2.4 The workplace is examined in line with specified requirements. Workplace hazards are dealt with in line with specified requirements.
- 2.5 The steelwork to be replaced is identified in line with specified requirements.
- 2.6 The consequences for occupational health, safety and production of not preparing to replace steelwork in a shaft in line with specified requirements, and current legislation are explained.

## **Element 3: Replace the steelwork**

### **Performance Criteria**

- 3.1 The required personal protective equipment is used in a way that is consistent with its purpose, design and specified requirements.
- 3.2 Work related hazards are dealt with in line with specified requirements.
- 3.3 The steelwork is removed in line with sequence and current accepted best practice.
- 3.4 The replacement steelwork is installed in line with sequence, tolerances and current accepted best practice.
- 3.5 Interpersonal interaction is positive, consistent with specified requirements and promotes effective teamwork. The tools and equipment are used in line with manufacturers' design and without injury to self and others.

## **Element 4: Prepare the shaft for operation and production**

### **Performance Criteria**

- 4.1 The conveyance is guided through the section to determine if the replaced steelwork is functioning in line with specified requirements.
- 4.2 The workplace is cleaned and free from hazards in line with specified requirements and good housekeeping practices.
- 4.3 Tools, material and equipment selected are dealt with in line with specified requirements.
- 4.4 A trial run of all conveyances is performed through the shaft in line with specified requirements.
- 4.5 The relevant logbooks are cleared in line with specified requirements.
- 4.6 The report on work performed complies with specified requirements for format, content, accuracy and distribution. The report is delivered within the agreed time.

### **Registration Data**

<b>Subfield:</b>	Lifting, Shifting and Secure Loads
<b>Date first registered:</b>	27 September 2012
<b>Date this version registered:</b>	27 September 2012
<b>Anticipated review:</b>	2015
<b>Body responsible for review:</b>	Namibia Training Authority