

	<b>Unit ID: 1004</b>
<b>Domain</b>	<b>INTERMEDIATE SCAFFOLDING</b>
<b>Title:</b>	<b>Erect, operate and dismantle proprietary winches on scaffolding</b>
<b>Level: 4</b>	<b>Credits: 10</b>

### **Purpose**

This unit standard specifies the competencies required to erect, operate, and dismantle proprietary winches on scaffolding. It includes planning and preparing for the erection of a winch on scaffolding, assembling and erecting a winch on scaffolding, checking the stability and compliance of the structure, operating a winch on scaffolding, and dismantling a winch on scaffolding. This unit standard is intended for those who work in lifting machine operations environment.

### **Special Notes**

1. Entry information:  
Prerequisite:
  - Unit 937 - *Apply safety rules and regulations in lifting machine operations* or demonstrated equivalent knowledge and skills.
2. To demonstrate safe working practices the learner should be in possession of personal protective equipment which includes safety glasses, goggles, visors, safety gloves, gauntlets and helmets.
3. This unit standard deals with lifts made with proprietary winches attached to scaffolding. The lifts are to be of weights not exceeding 250 kilograms and to heights within ranges specified by manufacturer's instructions. Lifts beyond these specifications are notifiable and are conducted by qualified riggers from scaffold strengthened to the design requirements of a Registered Engineer.
4. This unit standard is to be assessed using proprietary winches designed for safe working loads of less than 250 kilograms.
5. This unit standard does not assess cantilevered platforms or hoists and specifically excludes the lifting of people. Winches with cantilevered arms may be used however.
6. Glossary of terms:
  - A '*client*' refers to an individual or representative of a company who commissions a particular scaffold or scaffolding structure to be erected, or is an end user of the scaffold or scaffolding structure.
  - 'BPGFS' refers to best practice guidelines for scaffolding.

7. Design, erection, and dismantlement of scaffolds and scaffolding structures in this unit standard must take place under the direct supervision of a certified scaffolder who holds a current Certificate of Competence for the scaffolding concerned.
8. Evidence is required for at least two proprietary winches, where possible one pneumatic and one electrical, and the structures and components associated with each. Assessment should not be conducted in scaffolding requiring a Registered Engineer to certify the adequacy of the design prior to the erection of the scaffold.
9. Assessment evidence may be collected from a real workplace, or an appropriate simulated realistic environment in which lifting machine operations are carried out.
10. All inspection, operation and maintenance procedures associated with the use of tools and equipment shall comply with manufacturers' specifications, guidelines and instructions.
11. Regulations and legislation relevant to this unit standard include the following:
  - Labour Act, No. 11, 2007
  - Occupational Health and Safety Regulations No. 18, 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: Plan and prepare for the erection of a winch on scaffolding**

#### **Range**

Erection and lay out plan requirements must include the weight and nature of the load to be carried, start and end points of lift, placement on the scaffold, clearway, ties and bracing including tie points to a supporting structure; may also include but is not limited to fulcrum point, transverse bracing, or splicing of standard(s) and additional scaffolding such as platforms to support lifting operations and control functions and scaffolding to provide protection and access.

#### **Performance criteria**

- 1.1 Erection requirements are confirmed with the work supervisor or client.
- 1.2 A lay out plan is drawn in accordance with the BPGFS and manufacturer's instructions.

## **Element 2: Assemble and erect a winch on scaffolding**

### **Range**

Stability of the scaffold must include but is not limited to security of additional scaffolding and ties.

Winch and associated safety equipment for air-operated winches, must include but is not limited to an oil bottle in the compression line.

Winch and associated safety equipment for electrical winches, must include but is not limited to a transformer or other Residual Current Device (RCD).

### **Performance criteria**

- 2.1 Ties, bracing and any additional scaffolding are erected in accordance with the layout plan and the BPGFS.
- 2.2 The stability of the scaffold is confirmed prior to assembly and attachment of the winch.
- 2.3 The winch and associated equipment, including safety equipment, is moved to the correct location and secured to the scaffold in accordance with the layout plan and the manufacturer's instructions.
- 2.4 The winch and associated safety equipment are assembled and checked in accordance with the manufacturer's instructions and the BPGFS.

## **Element 3: Check the stability and compliance of the structure**

### **Performance criteria**

- 3.1 The stability of the winch and associated components is checked and confirmed with the layout plan, and any adjustments made as necessary.
- 3.2 The entire structure is checked for compliance with the BPGFS inspection report.
- 3.3 A BPGFS inspection report is completed in accordance with the BPGFS.
- 3.4 Where the structure is not compliant changes are made to it to ensure compliance and the BPGFS report is amended accordingly.
- 3.5 Inspection of the structure by a certificated scaffolder who has an appropriate certificate or by a Registered Engineer is sought in accordance with the BPGFS practice. Where the structure is not compliant changes are made to ensure compliance.

#### **Element 4: Operate a winch on scaffolding**

##### **Performance criteria**

- 4.1 Load is moved safely using the erected winch.
- 4.2 The winch is operated in accordance with the manufacturer's instructions.

#### **Element 5: Dismantle a winch on scaffolding**

##### **Performance criteria**

- 5.1 The winch and associated equipment is dismantled and safely removed in accordance with the BPGFS and manufacturer's instructions.
- 5.2 Scaffolding components including ancillary scaffolding structures, bracing and ties are dismantled in sequence in accordance with the BPGFS.

#### **Registration Data**

<b>Subfield:</b>	Lifting Equipment
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<b>Body responsible for review:</b>	Namibia Training Authority