

Domain	CRANE OPERATION - CORE	Unit ID: 1164
Title:	Demonstrate knowledge of skills required in crane operations	
Level: 2		Credits: 12

Purpose

This unit standard is intended for those who carry out crane operations. People holding credit for this unit standard are able to: Identify the safety and suitability of a crane prior to utilisation; demonstrate knowledge of leverage application; and react to recognised hand signals.

Special Notes

1. This unit standard refers to a range of crane types (capacity and functionality) used in familiar operational functions in different industry contexts, and in range of environmental conditions (e.g. poor weather).
2. Assessment evidence may be collected from a real workplace or a simulated workplace in which crane operations are carried out.
3. Safe working practices include but are not limited to day-to-day observation of safety policies and procedures, and compliance with emergency procedures.
4. Performance of all elements in this unit standard must comply with all relevant legal and workplace requirements, contractual agreement and/or manufacturers' specifications.
5. Regulations and legislation, including subsequent amendments, relevant to this unit standard may include but are not limited to the following:
 - Labour Act, No. 11 of 2007
 - Regulations relating to the Health and Safety of employees at work, 1997
 - Road Traffic and Transport Regulations No. 52, 1999 and Government Notice No 53 Road Traffic and Transport Regulations
and all industry specific regulations, legislations, code of practice, or code of conduct.

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. All approved unit standards, qualifications and national assessment arrangements are available on the Namibia Training Authority website www.nta.com.na.

Elements and Performance Criteria

Element 1: Identify the safety and suitability of a crane prior to utilisation

Range

Safety and suitability may include but is not limited to freight characteristics, manufacturer's requirements, and environmental conditions.

Performance Criteria

- 1.1 The different types of cranes and their main components, specific purpose or usage, and their safety aspects, are identified and described.
- 1.2 The concepts of slings, centre of gravity, and eccentric loading are explained.
- 1.3 The safe use of wire rope, strapping, nylon rope, chain slings, eyebolt installation and shackles is explained and demonstrated.
- 1.4 The load to be lifted is assessed in terms of type and proposed weight distribution.
- 1.5 The crane most suitable for a particular application is selected according to environmental conditions, freight type and safe working load.

Element 2: Demonstrate knowledge of leverage application

Performance Criteria

- 2.1 Demonstrate knowledge of leverage in relation to the load and capacity chart.
- 2.2 Demonstrate knowledge of what constitutes the load rating in relation to the load radius, height, and stability, structural and operational area.

Element 3: React to recognised hand signals

Performance Criteria

- 3.1 The importance of accurate communication during lifting operation and moving operation is explained.
- 3.2 Hand communication signals are demonstrated and defined.
- 3.3 Crane operation according to recognised hand signals is simulated.
- 3.4 Alternative methods of communication are identified and demonstrated.

Registration Data

Subfield:	Lifting, shifting, securing loads
Date first registered:	27 March 2013
Date this version registered:	27 March 2013
Anticipated review:	2016
Body responsible for review:	Namibia Training Authority