

Domain	METAL FABRICATION-CORE	Unit ID: 249
Title:	Carry out basic rigging and safe lifting practices as part of metal fabrication operations	
Level: 3		Credits: 4

Purpose

This unit standard specifies the competencies required to carry out basic rigging and safe lifting practices as part of metal fabrication operations. It includes planning and preparing for load-slinging, sling-loading, and completion of work as well as cleaning up. This unit standard is intended for those who work as welders and boilermakers.

Special Notes

1. Entry information

Prerequisite:

- *Unit 228* - Apply safety rules and regulations in a metal fabrication work environment or demonstrated equivalent knowledge and skills.
2. To demonstrate competence, at a minimum, evidence is required of moving or locating plant and equipment using the four load slinging methods listed in Special Note 3. These tasks should be performed ensuring correct identification of requirements and finishing of the tasks, correct selection and use of appropriate processes, tools and equipment and completing all work to specification.
 3. Load slinging methods include but are not limited to straight sling, adjustable sling, reeved sling and inclined sling.
 4. Planning and preparation include but is not limited to worksite inspection, equipment defect identification, assessment of conditions and hazards and determination of work requirements.
 5. Assessment evidence may be collected from a real workplace or a simulated real workplace or an appropriate simulated realistic environment in which metal fabrication operations are carried out.
 6. Performance of all elements in this unit standard must comply with manufacturers' specifications and workplace specific requirements.
 7. '*Specifications*' refers to any, or all of the following: manufacturers' specifications and recommendations, site and workplace specific requirements.
 8. Regulations and legislation relevant to this unit standard include the following:
 - Labour Act 6 of 1992
 - Occupational Health and Safety Regulations No. 18, 1997 and all subsequent amendments.

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.

Elements and Performance Criteria

Element 1: Plan and prepare for load slinging

Range

Equipment is to include but is not limited to wire ropes, chain and nylon slings, web belts, turn buckles, shackles, chain blocks and tirsors.

Performance Criteria

- 1.1 Work instructions, plans and specifications as well as operational details are obtained, confirmed and applied.
- 1.2 Safety requirements are followed in accordance with safety plans and policies.
- 1.3 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults rectified or reported prior to commencement.
- 1.4 Materials appropriate to the work application are identified, obtained, safely handled and located ready for use.
- 1.5 Lifting equipment is inspected according to manufacturers' specifications.

Element 2: Sling load

Range:

Slinging include but is not limited to attaching equipment to loads with and without lugs, balancing the load and checking work clearances.

Signals include but are not limited to hand signals, whistle and electronic devices.

Performance Criteria:

- 2.1 Risk assessment is conducted in accordance with workplace procedures.
- 2.2 Sling loads are fixed with and without lugs as per requirements.
- 2.3 Loads are balanced in accordance with workplace procedures.

- 2.4 Working clearances are checked.
- 2.5 Safe work load of equipment and lifting machines is determined.
- 2.6 Standard communication signals are used to coordinate safe movement of loads.

Element 3: Complete work and clean up

Range

Work completion procedures include but are not limited to cleaning up, processing documents and reporting load activities to responsible person.

Performance Criteria

- 3.1 Work area is cleared and materials disposed of, reused and recycled in accordance with legislation and job specification.
- 3.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and workplace practices.
- 3.3 Work completion procedures, including completing documents, are applied and relevant personnel notified.

Registration Data

Subfield:	Mechanical Engineering
Date first registered:	29 March 2007
Date this version registered:	29 March 2007
Anticipated review:	2012
Body responsible for review:	Namibia Training Authority