

Domain	METAL FABRICATION-CORE	Unit ID: 250
Title:	Interpret and draw basic engineering drawings and sketches as part of metal fabrication operations	
Level: 3		Credits: 4

Purpose

This unit standard specifies the competencies required to interpret and draw basic engineering drawings and sketches as part of metal fabrication operations. 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 interpreting and drawing basic engineering drawings for two different projects. 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. 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.
 4. Performance of all elements in this unit standard must comply with manufacturers' specifications and workplace specific requirements.
 5. '*Specifications*' refers to any, or all of the following: manufacturers' specifications and recommendations, site and workplace specific requirements, as well as design information.
 6. Regulations and legislation relevant to this unit standard include the following:
 - Occupational Health and Safety Regulations No. 18, 1997
 - Labour Act 6 of 1992
 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: Interpret basic engineering sketches and drawings

Performance Criteria

- 1.1 Orthographic drawings and isometric drawings are interpreted.
- 1.2 Dimensions and instructions on drawings and sketches are interpreted.
- 1.3 Symbols on drawings and sketches are identified and interpreted.

Element 2: Draw basic engineering sketches and drawings

Performance Criteria

- 2.1 Free hand sketches are drawn to specifications.
- 2.2 Orthographic drawings and isometric drawings are drawn to specifications.
- 2.3 Symbols, signs and dimensions are applied to drawing specifications.

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