**Unit ID: 250** 

Domain Title:

# METAL FABRICATION-CORE Interpret and draw basic engineering drawings and sketches as part of metal fabrication operations

Level: 3 Credits: 4

## **Purpose**

This unit standard is intended for those who interpret and draw basic engineering drawings and sketches as part of metal fabrication operations. People credited with this unit standards are able to interpret basic engineering sketches and drawings as well as draw basic engineering sketches and drawings.

This unit standard is intended for those who works 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.
- Unit 229 Plan and organize metal fabrication work
- 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 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 11 of 2007 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 <a href="https://www.nta.com.na">www.nta.com.na</a>.

### **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:                     | Manufacturing Engineering  |
|-------------------------------|----------------------------|
|                               |                            |
| Date first registered:        | 29 November 2018           |
| Date this version registered: | 29 November 2018           |
| Anticipated review:           | 2023                       |
|                               |                            |
| Body responsible for review:  | Namibia Training Authority |