

Unit ID: 228

Domain

**METAL FABRICATION-CORE**

Title:

**Apply safety rules and regulations in a  
metal fabrication work environment**

Level: 1

Credits: 2

### **Purpose**

This unit standard specifies the competencies required to apply safety rules and regulations in a metal fabrication work environment. It includes observing safety and health regulations, maintaining a safe working environment, identification and use of personal protection equipment, risk assessment, following emergency procedures as well as cleaning up. This unit is intended for those who work as welders and boilermakers.

### **Special notes**

1. This unit standard is to be delivered and assessed in the context of metal fabrication operations and should be assessed in conjunction with other relevant technical unit standards selected from this domain.
2. Safe working practices are to include day to day observation of safety policies and procedures, risk assessment, emergency procedures and use of basic fire fighting equipment.
3. Assessment evidence may be collected from a real workplace or a simulated real workplace or an appropriate simulated realistic environment in which boilermaker 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.
6. Regulations and legislation relevant to this unit standard include the following:
  - Labour Act 6, 1992
  - Occupational Health and Safety Regulations No.18, 1997and 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](http://www.nta.com.na).

## **Elements and Performance Criteria**

### **Element 1: Observe workplace safety and health procedures**

#### **Performance Criteria**

- 1.1 Work safety procedures are obtained, confirmed and applied.
- 1.2 Safety requirements are identified and followed in accordance with legislative requirements.

### **Element 2: Maintain a safe working environment**

#### **Range**

Isolation procedures include but are not limited to mechanical and electrical lock out procedures.

Safety guards include but are not limited to automatic, fixed and interlocking types of guarding.

Signs are to include but are not limited to hazard identification, facility or location signs, warning signs and symbols, site safety, directional and traffic signs and symbols.

#### **Performance Criteria**

- 2.1 Sign and barricade requirements are identified and implemented in line with enterprise and legislative requirements.
- 2.2 Tools, machines and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and faults are rectified or reported prior to commencement.
- 2.3 Lock out and isolation procedures are carried out correctly.
- 2.4 Safety guards are identified and used.
- 2.5 Hazardous materials are handled and stored in compliance with legal requirements.
- 2.6 Work area is evaluated for safe storage practices.

### **Element 3: Select and use personal protective equipment**

#### **Range**

Personal protective equipment is to include but is not limited to overalls, steel capped boots, high visibility vest or jacket, gloves, safety glasses, hard hat, cap, dust mask or respirator, ear muffs or plugs.

### **Performance Criteria**

- 3.1 Appropriate personal protective equipment is used in accordance with enterprise and legislative requirements.
- 3.2 Hazardous materials are handled with the appropriate personal protective clothing and equipment in line with enterprise and legislative requirements.
- 3.3 Appropriate personal protective equipment for working at elevated heights is used in line with enterprise and legislative requirements.

### **Element 4: Assess risks**

#### **Range**

Hazards may include but are not limited to chemical spills, gases, liquids under pressure, moving machinery and equipment, hazardous materials, high temperatures, noise, dust, vapours, fires and sharp equipment.

### **Performance Criteria**

- 4.1 Hazards in work area are identified, assessed and reported to designated personnel.
- 4.2 Safe workplace procedures and work instructions are followed for controlling/minimising risks.
- 4.3 Safety, hazard, accident or incident reports are completed according to enterprise requirements and safety legislation.

### **Element 5: Follow emergency procedures**

#### **Range**

Appropriate personnel to be contacted in case of an emergency, accident, fire or to report a risk are designated safety officers determined by the enterprise, who have undertaken specific safety response training, supervisors, managers or other senior personnel.

Emergency procedures are to include but are not limited to extinguishing fires, organisational first aid and evacuation.

Types of fire may include but are not limited to electrical, chemical, gas, mechanical, paper, wood or natural fire.

Fire fighting equipment is to include fire truck, fire reel, fire hydrant and hoses, fire extinguishers and manual fire fighting equipment.

### **Performance Criteria**

- 5.1 Appropriate personnel are identified and informed in the event of an emergency.
- 5.2 Safe workplace procedures for dealing with accidents, fires and emergencies are followed within scope of responsibilities.
- 5.3 Emergency and evacuation procedures are practiced and carried out when required.

### **Element 6: Clean up**

#### **Performance Criteria**

- 6.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation, regulations and job specifications.
- 6.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and enterprise requirements.

### **Registration Data**

<b>Subfield:</b>	Mechanical Engineering
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<b>Body responsible for review:</b>	Namibia Training Authority