

Domain	METAL FABRICATION-CORE	Unit ID: 234
Title:	Assemble and test oxy-acetylene welding equipment as part of metal fabrication operations	
Level: 2		Credits: 4

Purpose

This unit standard specifies the competencies required to assemble and test oxy-acetylene welding equipment as part of metal fabrication operations. It includes assembling, testing and dismantling ox- fuel welding equipment as well as completion of work and 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 safely assembling and testing oxy-acetylene welding equipment to perform two tasks that require the inspection, assembling, testing and dismantling of oxy-acetylene welding equipment. These tasks should be performed ensuring correct identification of requirements and finishing of the task, 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 welding and 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:
 - Occupational Health and Safety Regulation Act No. 18, 1997
 - National Occupational Safety Association Regulations
 - 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: Assemble oxy-acetylene equipment

Range

Components of oxy-acetylene equipment include regulators, flashback arrestors, hoses and quick couplings.

Performance Criteria

- 1.1 Components of oxy-acetylene welding equipment are inspected for conformity with standard operating requirements.
- 1.2 Hand tools appropriate to the task are selected and inspected prior to commencing assembling.
- 1.3 Oxy-acetylene equipment is assembled in accordance with manufacturers' specifications.

Element 2: Test oxy-acetylene equipment

Range

Appropriate flames are to include neutral, oxidising and carburising flame.

Performance Criteria

- 2.1 Personal protective equipment is selected and used in line with workplace and regulatory requirements.
- 2.2 Equipment is purged and leak tested in accordance with standard operating procedures.
- 2.3 Pressures and appropriate flame are set in accordance with requirements of the selected process.
- 2.4 Shut down procedure is undertaken in accordance with standard operating procedures.

Element 3: Dismantle oxy-acetylene equipment

Performance Criteria

- 3.1 Hand tools appropriate to the task are selected and inspected.
- 3.2 Oxy-acetylene welding equipment is dismantled in accordance with manufacturers' recommendations.

Element 4: Complete work and clean up

Performance Criteria

- 4.1 Work is completed and appropriate personnel notified in accordance with worksite and workshop procedures.
- 4.2 Work area is cleared of waste, cleaned, restored and secured in accordance with worksite and workshop procedures.
- 4.3 Tools and equipment are cleaned, checked, maintained and stored in accordance with worksite and workshop procedures.
- 4.4 Work completion details are finalised and recorded in accordance with worksite and workshop procedures.

Registration Data

Subfield:	Mechanical Engineering
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