



Australian Government

**Assessment Requirements for
AURVTW018 Carry out oxyacetylene
welding, thermal heating and cutting**

Release: 1

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Modification History

Release	Comment
Release 1	New unit of competency.

Performance Evidence

The candidate must demonstrate they can perform the following according to the standards defined in the elements, performance criteria and foundation skills of this unit.

The candidate must demonstrate using oxyacetylene welding, thermal heating and cutting equipment to carry out welds that safely follow workplace procedures to meet required outcomes. This includes:

- carrying out oxyacetylene welding procedures on:
 - one butt joint, 150 mm long
 - one fillet joint, 150 mm long
 - one lap joint, 150 mm long
 - one exhaust pipe joint
- carrying out a thermal cutting task:
 - a straight cut of 150 mm long
- carrying out one of the following thermal heating tasks:
 - freeing a corroded bolt or fitting
 - freeing a corroded exhaust component.

Knowledge Evidence

The candidate must demonstrate the following knowledge:

Key policies and procedures for carrying out oxyacetylene welding, thermal heating and cutting, including:

- how to locate and interpret the following:
 - original equipment manufacturer (OEM) or authorised agency standards relating to oxyacetylene welding, thermal heating and cutting activity
 - Australian welding Standard AS1554
 - workplace instructions relating to carrying out oxyacetylene welding, thermal heating and cutting activity

- workplace procedures relating to carrying out oxyacetylene welding, thermal heating and cutting activity
- the following workplace health and safety requirements for carrying out oxyacetylene welding, thermal heating and cutting:
 - selecting and using personal protective equipment (PPE) to use oxyacetylene equipment, including approved oxyacetylene welding glasses
 - using specialist welding, thermal heating and cutting tools and equipment
 - manually handling components and welding, thermal heating and cutting equipment
 - identifying and controlling hazards
- the following environmental requirements for carrying out oxyacetylene welding, thermal heating and cutting:
 - procedures for trapping, storing and disposing of waste materials
- the following procedures for oxyacetylene welding
 - the use and operation of oxyacetylene plant, including setting and adjusting pressure and gauges
 - reporting faults and material defects
 - final inspection
- workplace housekeeping and documentation procedures

Technical information regarding oxyacetylene welding, thermal heating and cutting including:

- the types and characteristics of different metals
- the following oxyacetylene flame identification and adjustment processes:
 - natural
 - carburising
 - oxidising
- the following maintenance requirements of oxyacetylene equipment:
 - checking for oxyacetylene gas leaks from gauges, fittings and hoses
- methods and techniques for thermal heating and cutting
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Assessment Conditions

The assessment must:

- include access to:
 - an automotive repair workplace or simulated workplace that reflects workplace conditions - where simulation is used, it must reflect real working conditions by modelling industry operating conditions and contingencies, as well as, using suitable facilities, equipment and resources
 - repair orders and workplace instructions relating to oxyacetylene welding, thermal heating and cutting activity

- workplace procedures relating to oxyacetylene welding, thermal heating and cutting activity
- oxyacetylene welding, thermal heating and cutting equipment operating procedures
- OEM or authorised agency standards relating to oxyacetylene welding, thermal heating and cutting
- Australian welding Standard AS1554
- PPE required to use oxyacetylene welding equipment
- welding equipment, consumables and materials
- oxyacetylene plant
- tools, equipment and materials suitable for carrying out oxyacetylene welding, thermal heating and cutting
- be demonstrated in the workplace or in a simulated environment that reflects workplace conditions
- be conducted in a safe environment
- be assessed in compliance with relevant legislation and regulations; and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed
- confirm consistent performance can be applied in a range of relevant workplace circumstance

Assessor Requirements

Assessors of this unit must:

- satisfy the assessor requirements in applicable vocational education and training legislation, frameworks and/or standards
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Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1>