



**Australian Government**

# **MEMPE002 Use electric welding machines**

**Release: 1**

## MEMPE002 Use electric welding machines

### Modification History

Release 1. Supersedes and is equivalent to MEMPE002A Use electric welding machines.

### Application

This unit of competency defines the skills and knowledge required to use manual metal arc, gas metal arc or gas tungsten arc welding machines.

The welding is not required to meet any Australian Standard. Fillet and butt welds would typically be performed on low carbon or mild steels and aluminium if required. The basic settings for the welding machine and welding materials are supplied to the individual.

This unit describes entry-level skills and knowledge in preparation for employment within the metal, engineering, manufacturing and associated industries and is suitable for use in institutional-based vocational programs. Skills development take places under direct supervision.

It is not to be used in a traineeship or apprenticeship training program or associated qualifications. It is only to be used in pre-employment programs and carries no credit towards apprenticeship/trade and other qualification types in manufacturing and engineering.

This skills in this unit are intended to be developed in combination with the project unit, MEMPE006 Undertake a basic engineering project.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

### Pre-requisite Unit

Nil

### Competency Field

Pre-employment

### Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify weld requirements	1.1 Comply with work health and safety (WHS) requirements at all times 1.2 Identify weld requirements from work information in consultation

<b>Elements</b>	<b>Performance Criteria</b>
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	with a supervisor 1.3 Identify which type of welding is suitable for the job 1.4 Identify location of welds in accordance with job requirements 1.5 Confirm weld locations with supervisor
2. Prepare for welding	2.1 Clean and prepare low carbon or mild steel or similar ready for welding 2.2 Set up welding equipment according to given instructions
3. Perform welding	3.1 Use and wear appropriate personal protective equipment (PPE) in accordance with procedures 3.2 Follow safe welding practices 3.3 Weld materials to job requirements 3.4 Clean welds safely 3.5 Store completed work as instructed
4. Complete work requirements	4.1 Clear work area of waste and clean according to requirements 4.2 Maintain and/or store machines, tools and equipment according to instructions

## Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

## Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Work information includes one or more of the following:	<ul style="list-style-type: none"> <li>• drawings</li> <li>• sketches</li> <li>• job instructions</li> </ul>
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	<ul style="list-style-type: none"><li>• schematics</li><li>• diagrams</li><li>• technical manuals.</li></ul>
Type of welding includes one or more of the following:	<ul style="list-style-type: none"><li>• manual metal arc welding</li><li>• gas metal arc welding</li><li>• tungsten metal arc welding.</li></ul>

## Unit Mapping Information

Release 1. Supersedes and is equivalent to MEMPE002A Use electric welding machines.

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>