



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **MEM05024B Perform welding supervision**

**Release: 1**

## MEM05024B Perform welding supervision

### Modification History

Not Applicable

### Unit Descriptor

<b>Unit descriptor</b>	This unit covers instructing and qualifying welders in accordance with weld procedures, and maintaining quality and safety procedures.
------------------------	--

### Application of the Unit

<b>Application of the unit</b>	<p>Competencies in this unit are based on wide knowledge of welding science, processes, procedures and technical requirements. Individuals working in this field would hold at least one certificate satisfying the requirements of Australian Standard 1796 Certificate 1-9. The supervision, training and qualification of welders in welding procedures is defined by recognised codes and standards e.g. Australian Standard 2214 and Australian Standard 1796 Certificate 10.</p> <p><b>Band: B</b></p> <p><b>Unit Weight: 12</b></p>
--------------------------------	--

### Licensing/Regulatory Information

Not Applicable

## Pre-Requisites

Prerequisite units		
Path 1	MEM05026C	Apply welding principles

## Employability Skills Information

Employability skills	This unit contains employability skills.
----------------------	--

## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
---	--

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Determine and prepare welding procedure	1.1. Welders are instructed according to procedure. 1.2. Welding parameters are determined in accordance with procedures 1.3. Variables and sequence checks are planned against documentation. 1.4. Documentation is prepared for record keeping.
2. Qualify welders to required procedures	2.1. Welders are trained in relevant procedures. 2.2. Welders are tested against relevant procedures. 2.3. Welder performance reports against procedures are maintained.
3. Monitor/maintain quality assurance and safety procedures	3.1. Internal quality assurance plan is monitored. 3.2. Traceability of materials is ensured. 3.3. Welding is supervised to ensure compliance with prescribed specifications and/or documented procedures and/or safety procedures.
4. Prepare documents	4.1. Procedure is recorded against pre-qualifying procedures. 4.2. Findings on internal quality assurance plan are recorded.
5. Arrange for non-destructive testing and destructive testing	5.1. Weld tests appropriate to the weld procedure are arranged. 5.2. Non-destructive testing/destructive testing reports are verified against job requirements and specifications.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Look for evidence that confirms skills in:

- individuals working in this field would hold at least one certificate satisfying the requirements of Australian Standard 1796 Certificate 1-9.
- welding to the procedure being supervised

**REQUIRED SKILLS AND KNOWLEDGE**

- providing training to welders on welding procedures
- communicating to welders on welding requirements
- planning of weld procedures
- writing workplace welding procedures, recording information on proformas and other workplace documents/reports

**Required knowledge**

Look for evidence that confirms knowledge of:

- welding science, principles and effects of heat treatment
- welding terms, codes and symbols
- welding processes, parameters and relation to weld quality
- welding procedures defined by code and technical requirements
- non-destructive testing
- any applicable industry standards, national/Australian standards, NOHSC guides, State/Territory regulatory codes of practice/standards
- use and application of personal protective equipment for welding supervision
- safe work practices and procedures

## Evidence Guide

### EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

A person who demonstrates competency in this unit must be able to provide appropriate supervision to welding tasks and outcomes. Competency in this unit cannot be claimed until all prerequisites have been satisfied.

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.

#### Context of and specific resources for assessment

This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, that is the candidate is not in productive work, appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with applying a wide knowledge of welding science, processes, procedures and technical requirements to the supervision process or other units requiring the exercise of the skills and knowledge covered by this unit.

#### Method of assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning should not require language, literacy and numeracy skills beyond those required in this unit. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

**EVIDENCE GUIDE****Guidance information for assessment****Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<b>Procedure</b>	As defined by the relevant codes and/or standards
<b>Documentation</b>	As defined by the relevant codes and/or standards
<b>Traceability</b>	The materials used in a nominated weld can be traced to their source in accordance with standard operating procedures

**Unit Sector(s)**

<b>Unit sector</b>	
--------------------	--

**Co-requisite units**

<b>Co-requisite units</b>	

## Competency field

Competency field	Fabrication
------------------	-------------