



Australian Government

MEMPE004 Use fabrication equipment

Release: 1

MEMPE004 Use fabrication equipment

Modification History

Release 1. Supersedes and is equivalent to MEMPE004A Use fabrication equipment.

Application

This unit of competency defines the skills and knowledge required to set up and use fabrication equipment to make engineering components.

It 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 takes place 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. Prepare a job plan	1.1 Comply with work health and safety (WHS) requirements at all times 1.2 Identify job requirements from work information in consultation with a supervisor 1.3 Prepare a job plan showing machines, tooling, cutting speeds and feeds and an appropriate sequence of operations

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Confirm plan with supervisor
2. Fabricate components as required	2.1 Use and wear appropriate personal protective equipment (PPE) in accordance with procedures 2.2 Perform marking out and measuring according to job requirements 2.3 Use fabrication machinery to bend, roll or shape material to job requirements 2.4 Check work for conformance to requirements at each stage 2.5 Store completed work in a manner which will prevent/minimise potential damage 2.6 Follow safe working practices
3. Complete work requirements	3.1 Clear work area of waste and clean according to requirements 3.2 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:	• drawings • sketches • job instructions • schematics • diagrams • technical manuals.
Fabrication machinery	• shapers

includes one or more of the following:	• benders • rollers • cut off machines • guillotines.
Measuring equipment includes one or more of the following:	• tape measures • vernier scaled measuring devices • rules • gauges.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEMPE004A Use fabrication equipment.

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for MEMPE004 Use fabrication equipment

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include:

- following work instructions and safe work practices
- reading and interpreting routine information on written job instructions
- preparing materials
- setting fabrication equipment according to given instructions on at least two occasions
- using fabrication equipment on at least two occasions to bend, roll or shape metal
- using appropriate measuring skills
- cleaning and storing of machines and equipment.

Note: Where a volume and/or frequency is not specified, demonstration must be provided at least once.

Knowledge Evidence

Evidence required to demonstrate the required knowledge for this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include knowledge of:

- safe work practices and use of personal protective equipment (PPE)
- safe operation of machines/equipment
- fabrication machinery
- material and equipment preparation requirements
- basic marking out techniques
- use and care of measuring tools
- machine types for bending, rolling and shaping
- work and tool holding methods for each machine.
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Assessment Conditions

- Assessors must:
 - have vocational competency in using fabrication equipment at least to the level being assessed with relevant industry knowledge and experience

- satisfy the assessor requirements in the *Standards for Registered Training Organisations 2015 or its replacement* and comply with the *National Vocational Education and Training Regulator Act 2011*, its replacement or equivalent legislation covering VET regulation in a non-referring State as the case requires.
- This unit must be assessed in a learning institution and must cover the successful use of fabrication equipment and the skills developed would usually be developed by an individual working alone under direct supervision.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required including relevant workplace procedures, product and manufacturing specifications.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
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