



Australian Government

MEM07032 Use workshop machines for basic operations

Release: 1

MEM07032 Use workshop machines for basic operations

Modification History

Release 1. Supersedes and is equivalent to MEM07032B Use workshop machines for basic operations

Application

This unit of competency defines the skills and knowledge required to use workshop machines for basic operations in maintenance or jobbing environment.

Where the interpretation of technical drawings is required unit MEM09002 Interpret technical drawing should also be selected.

Where the selection and use of engineering measurement is required unit MEM12023 Perform engineering measurements should also be selected.

Where the selection and use of power tools/hand held operations is required unit MEM18002 Use power tools/hand held operations should also be selected.

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

Band: A

Unit Weight: 2

Pre-requisite Unit

MEM11011	Undertake manual handling
MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information
MEM18001	Use hand tools

Competency Field

Machine and process operations

Elements and Performance Criteria

Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
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1	Determine job requirements	1.1	Follow standard operating procedures (SOPs)
		1.2	Comply with work health and safety (WHS) requirements at all times
		1.3	Use appropriate personal protective equipment (PPE) in accordance with SOPs
		1.4	Identify job requirements from specifications, sketches, job sheets or work instructions
2	Set up machine	2.1	Select appropriate machine and tools to meet work requirements
		2.2	Sharpen cutting tools, as required
		2.3	Install tools according to procedures
		2.4	Set guards and adjust, as required
3	Operate machine	3.1	Mount material to be machined and secure using clamping device/ appropriate to the material and work requirements
		3.2	Operate machine to suit work and material requirements
		3.3	Check machined component against work requirements and predetermined finish
		3.4	Make adjustments, as required

Foundation Skills

This section describes those required skills (reading, writing, oral communication and numeracy) that are essential to workplace performance in this unit of competency.

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, accessibility of the item, and local industry and regional contexts) are included.

Machines include one (1) or more of the following:

- lathe
- radial arm drill
- mill

Cutting tools include one (1) or more of the following:

- lathe tools
- milling cutters
- drills

Materials include one (1) or more of the following:

- ferrous
- non-ferrous

Clamping devices include one (1) or more of the following:

- chucks
- vices
- clamps
- bars and packing

Unit Mapping Information

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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 MEM07032 Use workshop machines for basic operations

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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 on at least two (2) occasions and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- identifying and interpreting specifications and work instructions for machine operations
- setting up machines and selecting, sharpening and mounting tools required for the required job
- mounting the material to be processed and safely operating the machine
- checking machined components to ensure it meets specifications and making adjustments, as required.

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 procedures and use of personal protective equipment (PPE)
- cutting tool sharpening methods and techniques
- units of measurement, tool geometry and numerical operations required for basic machining operations
- safe operation of tool sharpening equipment and consequences of incorrect sharpening
- machine set-up and consequences of incorrect speeds and feeds
- procedures for operating workshop machines
- reasons for poor surface finish.

Assessment Conditions

- Assessors must:
 - have vocational competency in using workshop machines for basic operations 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/territory as the case requires

- Where possible assessment must occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills
- 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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