



Australian Government

MEM12001 Use comparison and basic measuring devices

Release: 1

MEM12001 Use comparison and basic measuring devices

Modification History

Release 1. Supersedes and is equivalent to MEM12001B Use comparison and basic measuring devices

Application

This unit of competency defines the skills and knowledge required to sort items in a production environment or at a workstation using basic comparison measuring equipment.

Where 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.

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

Competency Field

Measurement

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

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

		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	Use comparison and/or basic measuring devices	2.1	Identify and use measuring devices to undertake required comparisons or measurements using SOPs
		2.2	Undertake checking or sorting of items using comparison and/or basic measuring device according to SOPs
3	Maintain comparison and/or basic measuring devices	3.1	Maintain basic care and storage to manufacturers' standards or SOPs

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

Basic measuring devices include the following:

- linear measuring devices measuring to within 1 mm graduation, including rules, tapes and retractable tapes

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

- length
- angle
- size

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- temperature
- pressure
- weight
- voltage
- resistance
- amperage

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

- go/no-go devices
- thread angle and taper gauges
- temperature gauges
- pressure gauges
- measuring gauges and overlay indicators
- templates
- digital devices
- pre-set verniers and micrometres

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM12001B Use comparison and basic measuring devices

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 MEM12001 Use comparison and basic measuring devices

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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 measurement requirements from specifications, including sketches and job instructions
- selecting appropriate basic measuring device to achieve the required outcome
- selecting appropriate comparison devices to achieve the required outcome
- obtaining measurements in a safe and effective manner in accordance with SOPs
- storing and maintaining measuring devices according to manufacturer's specifications or SOPs.

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)
- use and application of various comparison and measurement devices
- procedures for the correct use of devices
- procedures for maintaining and storing devices.

Assessment Conditions

- Assessors must:
 - have vocational competency in using comparison and basic measuring devices 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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