



Australian Government

MEM18010 Perform equipment condition monitoring and recording

Release: 1

MEM18010 Perform equipment condition monitoring and recording

Modification History

Release 1. Supersedes and is equivalent to MEM18010C Perform equipment condition monitoring and recording

Application

This unit of competency defines the skills and knowledge required to undertake condition monitoring of equipment, including recording the results.

It applies where specialist monitoring activities are undertaken as part of a preventive maintenance or total productive maintenance plan or program and monitoring is undertaken in workshop, laboratory or in situ environment.

Where only routine maintenance checking and diagnostic skills are applied see other appropriate units.

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

Band: B

Unit Weight: 4

Pre-requisite Unit

MEM09002	Interpret technical drawing
MEM11011	Undertake manual handling
MEM12023	Perform engineering measurements
MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information
MEM18001	Use hand tools
MEM18002	Use power tools/hand held operations
MEM18055	Dismantle, replace and assemble engineering components

Competency Field

Maintenance and diagnostics

Elements and Performance Criteria

Elements describe the essential outcomes.

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

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, drawings, job sheets or work instructions
2	Undertake condition monitoring	2.1	Apply principles and methods of equipment condition monitoring
		2.2	Select appropriate condition monitoring technique to achieve required outcomes
		2.3	Undertake checks safely
		2.4	Plot results and report deviations from specification to appropriate authority and record

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.

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

- built-in systems (software and site displays)
- vibration monitors
- infra-red and ultraviolet non-destructive testing

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM18010C Perform equipment condition monitoring and recording

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 MEM18010 Perform equipment condition monitoring and recording

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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, charts, lists and drawings to perform equipment condition monitoring and recording
- selecting appropriate condition monitoring device/equipment to achieve the required outcomes
- carrying out condition monitoring, plotting results and reporting deviation from specifications according to procedures.

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)
- application of principles and methods for a variety of situations
- appropriate records for a variety of situations.

Assessment Conditions

- Assessors must:
 - have vocational competency in performing equipment condition monitoring and recording 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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