



Australian Government

MEM15010 Perform laboratory procedures

Release: 1

MEM15010 Perform laboratory procedures

Modification History

Release 1. Supersedes and is equivalent to MEM15010B Perform laboratory procedures

Application

This unit of competency defines the skills and knowledge required to work under laboratory conditions, perform calibration of equipment and write reports on the results. It applies to the use of a range of sophisticated equipment that provides independent feedback on quality processes and procedures.

Calibration refers to those calibrations which are conducted to a specified standard using equipment available in the workplace/laboratory. It can include the testing of known standard samples.

This unit would be taken in conjunction with appropriate technical units.

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.

Where the selection and use of tools is required unit MEM18001 Use hand tools and unit MEM18002 Use power tools/hand held operations, should also be selected as appropriate.

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

Band: B

Unit Weight: 8

Pre-requisite Unit

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

Competency Field

Quality

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 | <ul style="list-style-type: none">1.1 Follow standard operating procedures (SOPs)1.2 Comply with work health and safety (WHS) requirements at all times1.3 Identify job requirements from specifications, drawings, circuits, job sheets or work instructions |
| 2 Work under laboratory conditions and perform calibration | <ul style="list-style-type: none">2.1 Conduct independent tests under controlled conditions2.2 Verify and calibrate equipment to agreed quality standards2.3 Safeguard calibration status against unauthorised adjustment2.4 Keep accurate records for reference purposes2.5 Recall test equipment periodically for adjustment, repair and re-calibration2.6 Maintain documentary evidence to satisfy the requirements of the certifying body or as specified by the calibration standards or the manufacturer's recommendations2.7 Trace calibration of known accuracy to national or international reference standards or, where these do not exist, set calibration to specifically developed criteria |

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.

Tests will be conducted to a standard and include one (1) or more of the following:

- mechanical tests including for hardness, tensile and impact
- electrical tests including for resistance, capacitance and inductance
- semiconductor or other electronic tests

Test equipment includes one (1) or more of the following:

- mechanical
- electrical
- electronic
- some combination

Documentary evidence includes one (1) or more of the following:

- identification of equipment
- frequency of re-calibration
- calibration status
- procedures for:
 - recall
 - handling and storage
 - adjustment
 - repair
 - calibration
 - installation and use

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>