



Australian Government

MEM16012 Interpret technical specifications and manuals

Release: 1

MEM16012 Interpret technical specifications and manuals

Modification History

Release 1. Supersedes and is equivalent to MEM16012A Interpret technical specifications and manuals

Application

This unit of competency defines the skills and knowledge required to identify, access, interpret and analyse technical information in an enterprise. It covers explaining and using the information, and identifying implications of information changes on engineering or manufacturing work activities.

Where routine accessing, organising and communicating of information related to processes or tasks is required, MEM16006 Organise and communicate information should be selected.

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

Band: B

Unit Weight: 4

Pre-requisite Unit

MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information

Competency Field

Communication

Elements and Performance Criteria

Elements describe the essential outcomes.

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

1	Identify and locate technical information resources	1.1	Follow standard operating procedures and comply with work health and safety (WHS) requirements at all times
		1.2	Identify information needs and confirm with appropriate persons
		1.3	Identify workplace information resources and determine

Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.	
		their location in the information system	
		1.4	Obtain appropriate technical information
2	Access technical information	2.1	Locate relevant technical information using search techniques appropriate to the resource and information requirements
		2.2	Interpret symbols, codes, legends and abbreviations
		2.3	Obtain clarification or further explanation of technical information, as required
		2.4	Verify the revision status of the technical information to ensure currency and authenticity
3	Interpret and analyse technical information	3.1	Check technical information/data is appropriate to work requirements
		3.2	Interpret technical information and analyse for use in given engineering or manufacturing applications
		3.3	Use technical information according to the specific engineering or manufacturing application
4	Explain and use information	4.1	Explain information and analyses and distribute to appropriate personnel
		4.2	Use information resources according to work requirements
		4.3	Undertake work in accordance with acquired technical information
5	Identify implications of changes to technical	5.1	Monitor technical information systems for changes
		5.2	Identify personnel affected by changes to internal or external specifications or other technical information

Elements describe the essential outcomes.

information

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

- 5.3 Establish means of distributing changed information
- 5.4 Document changes to technical information according to enterprise procedures

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.

Information resources include one (1) or more of the following:

- documented management system (manufacturing, quality, environmental and WHS)
- manufacturers' manuals
- specifications
- Australian Standards
- international standards
- customer requirements
- industry manuals
- codes of practice
- legislation
- quality documentation
- equipment manufacturer specifications
- engineering data sheets

Location includes one (1) or more of the following:

- reference libraries
- workplace storage areas
- internet
- site

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Information system
includes one (1) or more
of the following:

- internal
- external

Search techniques
include one (1) or more
of the following:

- computer database
- internet search
- standard techniques to identify relevant information:
 - skimming and scanning
 - identifying key words/ideas
 - using index
 - table of contents
 - numbering
 - classification systems

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 MEM16012 Interpret technical specifications and manuals

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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 locating information resources appropriate for the purpose
- accessing, interpreting and drawing conclusions from analysis of technical information and data required for use in given engineering or manufacturing applications
- undertaking numerical operations, calculations and formulae appropriate to interpreting technical information
- communicating information and analyses of technical information and distributing to appropriate personnel in ways appropriate for the audience
- monitoring technical information systems for changes, notifying personnel and documenting changes to technical information 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
- available industry information resources
- uses and applications of information resources
- range of formats that information can be presented
- location and retrieval requirements of system information
- correct process used to identify relevant specifications
- quality improvement processes for information systems
- interpretation of technical data and information
- appropriate communication strategies
- dissemination of information regarding information systems
- range of instructional techniques
- implications of changes to technical information
- procedures for responding to information changes.

Assessment Conditions

- Assessors must:
 - have vocational competency in interpreting technical specifications and manuals 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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