



Australian Government

MEM234028 Produce and manage technical documentation

Release: 1

MEM234028 Produce and manage technical documentation

Modification History

Release 1. Supersedes and is equivalent to MEM234028A Produce and manage technical documentation.

Application

This unit of competency defines the skills and knowledge required to develop and produce engineering-related technical documentation and to manage documentation distribution and use either within an organisation or for use by external individuals and organisations people such as contractors and dealers.

Technical documentation can include production control records, work instructions and standard operating procedures (SOPs), process specifications, work health and safety (WHS) procedures, quality procedures, contractor instructions, and documentation required to comply with legislative and regulatory requirements.

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

Pre-requisite Unit

Nil

Competency Field

Engineering science

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Develop technical documentation	1.1 Evaluate the requirement for technical documentation, including purpose, scope and intended audience 1.2 Consult original sources of engineering and other technical data 1.3 Determine the required layout, style, content and resources required for production of documentation 1.4 Draft technical documentation and verify for accuracy against standards and other original sources 1.5 Develop review and version control procedures

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.6 Submit technical documentation, version control and review procedures for approval 1.7 Develop and apply a technical documentation archiving system that complies with organisational policy and applicable legislative and regulatory requirements
2. Produce and distribute technical documentation	2.1 Produce technical documentation and apply version and distribution controls 2.2 Distribute technical documentation
3. Monitor usage and revise technical documentation	3.1 Monitor the usage of technical documentation 3.2 Revise and improve technical documentation when necessary 3.3 Apply version and distribution controls to revised technical documentation

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

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.

Items determining the requirement for technical documentation include:	- organisational policy - standard procedures - quality procedures - production and process control requirements - the need to specify procedures and requirements for contractors - the need to comply with legislative requirements and associated regulations.
Types of technical documentation include:	- production and process control records - process specifications - work instructions, standard operating procedures (SOPs) and

	- checklists - certification documents - WHS procedures - quality procedures - contractor instructions - processes or records for compliance with legislation and/or regulations - tender or contract deliverable requirements.
Original sources include:	- engineering and other technical information used to inform and verify the technical documentation being produced - standards, codes, acts and regulations - manufacturer instructions and manuals - engineering-related textbooks and journals - professional engineers, scientists and other technical experts - technical drawings and other design information - customer brief - production records and schedules.
Version control is required whenever technical documentation is subject to revision and includes:	- either a date or issue number (or both) inserted in the document header or footer - formal recording process.
Distribution control includes:	- a listing of recipients of each type of document - a document tracking system.
Archiving of technical documentation includes:	- requirements to comply with legislative or regulatory requirements, and/or with organisational policy - an indexing system that specifies the period for which the document is to be retained - complying with relevant requirements regarding physical storage and security.
Regulatory requirements, and organisational policies and procedures include:	- organisational policy manuals - procedures manuals - quality manuals - Commonwealth and state/territory WHS legislation - industrial law and awards - consumer protection law - environmental protection - workers compensation - contract law.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM234028A Produce and manage technical documentation.

Links

Companion Volume Implementation Guides are available on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>

Assessment Requirements for MEM234028 Produce and manage technical documentation

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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 and include:

- identifying and establishing engineering and organisation goals and requirements for the project or operation that can bear on the production of technical documentation
- establishing resources required for the research, production, distribution and ongoing maintenance of technical documentation, including labour, materials, and equipment within budgets and procedures
- identifying and consulting original sources of engineering and technical data
- producing technical documentation and verifying for technical accuracy and suitability for application on at least two occasions
- distributing technical documentation to users
- arranging for handling of enquires, updates and version control on at least two occasions.

Note: Where a volume and/or frequency is not specified, demonstration must be provided at least once.

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:

- word processing, spreadsheet and database software to produce technical documentation
- reasons for developing technical documentation
- typical sources for researching engineering and technical data for applications and discipline area
- types of technical documentation
- layouts for technical documentation
- version and distribution control systems
- archiving systems
- legislative and regulatory requirements associated with technical documentation that are relevant to the organisation.

Assessment Conditions

- Assessors must:
 - have vocational competency in producing and managing technical documentation 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 that 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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