



Australian Government

MEM234029 Produce and manage technical publications

Release: 1

MEM234029 Produce and manage technical publications

Modification History

Release 1. Supersedes and is equivalent to MEM234029A Produce and manage technical publications.

Application

This unit of competency defines engineering skills and knowledge required to develop and produce engineering-related technical publications and to manage publications for use within an organisation and by downstream users including contractors and final customers.

Applications include workshop manuals, operating instructions, parts catalogues, procedures manuals and related technical publications.

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 publications	1.1 Identify the requirement for technical publications 1.2 Determine the required medium, style and layout 1.3 Obtain or access relevant data 1.4 Identify potential problems and consult relevant experts involved in product engineering design and/or production 1.5 Determine resolution strategies 1.6 Draft the publication using relevant guidelines and specified or selected software package 1.7 Select required graphics and prepare illustrator briefs to meet requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.8 Observe copyright legislation 1.9 Insert completed graphics into the draft and add annotations and/or labels 1.10 Prepare the draft for publication and submit for editorial review
2. Produce and distribute technical publications	2.1 Submit proof copy of the publication or publication amendment for client acceptance 2.2 Arrange publication in accordance with workplace procedures 2.3 Update distribution records, as required, and arrange delivery or distribution of the completed publication
3. Manage the amendment of technical publications	3.1 Identify the need for publication amendment action 3.2 Initiate amendment action in line with identified need 3.3 Produce or edit draft amendments 3.4 Arrange production and distribution of amendments in accordance with workplace procedures
4. Manage the distribution and control of technical publications	4.1 Establish a publication distribution and amendment control system 4.2 Manage publications in accordance with regulatory requirements, and organisational policies and procedures 4.3 Monitor the operation of the publication distribution and control system

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.

Technical publications include:	• workshop and procedures manuals • operating instructions • assembly instructions • parts catalogues • technical specifications • technical brochures for sales and marketing.
Required medium includes one or more of the following:	• print-based • digital • microfiche.
Style and layout are determined by one or more of the following:	• an applicable style guide • contract requirements • industry standards and specifications.
Relevant data sources include:	• design and production data and drawings • parts and materials listings • engineering specifications • operating procedure documentation • component assembly procedures • maintenance schedules • manufacturer and trade catalogues • relevant legislation and regulations.
Relevant experts include:	• client • design engineers and staff • production staff • maintenance managers and staff • component and material suppliers • regulator representatives.
Requirement for publication amendment action include:	• publication user feedback • modifications to systems or components • test procedure development or refinement • quality system audits • compliance with regulatory requirements.
Editing process includes checking:	• compliance with the style guide • completeness and ease of understanding • appropriate use of graphics • observance of applicable regulations and legislation including copyright • final draft mark-up for desktop publishing • application of version control procedures.
Sources of regulatory requirements, and	• organisational policy manuals • procedures and quality manuals

organisational policies and procedures include:	• Commonwealth and state/territory legislation and regulations in areas including work health and safety (WHS) and environmental protection • sustainability requirements.
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Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM234029A Produce and manage technical publications.

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 MEM234029 Produce and manage technical publications

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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 requirements for drafting and amendment of technical publications
- conducting research and gathering required data from engineering records and relevant engineering staff and managers
- selecting appropriate publication media and publication style and format
- selecting and using word processing software and graphic packages to draft technical publications
- preparing illustrator briefings and observing copyright legislation
- preparing proof copies of publications and obtaining client approval on at least two occasions
- managing the production and devising distribution, amendment and version control systems 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 and graphics packages used for technical publication and publication amendment drafting
- types of technical publications
- data sources for technical publications
- publication writing and editing conventions, standards and specifications
- use of style guides and illustration techniques
- reading of engineering drawings including:
 - standard drawing sheets and drawing layouts
 - types of drawing
 - engineering standards and specifications
 - technical terms and abbreviations

- sectioned views
- dimensioning and tolerancing of dimensions
- types of fit
- standard hardware and screw threads
- threaded components and washers
- locking devices and rivets
- special structural fasteners
- spur gears
- welding symbols and geometry tolerancing
- surface texture
- material specifications and metal surface treatment
- reading of electrical and electronic circuits and wiring diagrams
- development of system schematics and block diagrams
- sketching
- use and development of logic charts
- development of fault diagnosis guides
- preparation of illustrator briefs
- preparation of indexes to publication contents
- problem-solving methodology
- regulations relevant to technical publications and work health and safety (WHS) legislation
- procedures for processing drafts through desktop publishing to printing, binding and distribution for print-based publications
- principles for publication database systems and the development of input data for digital format publications
- requirements for, and methods of, maintaining publication records
- applicable publication standards and systems
- copyright legislation
- desktop publishing software systems
- printing methods
- binder systems
- management methods for amendment, custody and distribution of technical publications
- version control procedures including recording systems for amendment distribution and incorporation.
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Assessment Conditions

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