



Australian Government

Assessment Requirements for MEM30009 Contribute to the design of basic mechanical systems

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MEM30009A Contribute to the design of basic mechanical systems.

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:

- contributing to the design of basic mechanical systems on at least two occasions
- researching equipment function and operational requirements
- selecting appropriate components, assemblies and fasteners to perform the required function
- preparing preliminary design documentation
- issuing or filing completed documentation in accordance with SOPs.

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:

- relevant codes and standards
- basic mechanical components
- drive components
- lifting systems
- pneumatic systems and their advantages and disadvantages
- hydraulic systems and their advantages and disadvantages
- purpose of pumps and piping systems.
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Assessment Conditions

- Assessors must:
 - have vocational competency in contributing to the design of basic mechanical systems 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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Links

Companion Volume Implementation Guides are available on VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>