



Australian Government

**Assessment Requirements for MEM234031
Manage installation, commissioning or
modification of machines and equipment**

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MEM234031A Manage installation, commissioning or modification of machines and equipment.

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:

- determining features of machines or equipment and related work health and safety (WHS), regulatory and risk management requirements both before and after installation, commissioning or modification
- leading a multi-disciplinary team on at least two occasions including delegating roles, responsibilities and level of authority, to team members
- measuring, modelling, calculating and analysing using software and validation techniques including 2D and 3D modelling
- analysing drawings and manufacturer specifications to determine machine and equipment systems and components
- determining steps and processes needed for machine and equipment installation, commissioning or modification on at least two occasions
- evaluating solutions for feasibility against the installation, commissioning or modification criteria, including relevant engineering and financial calculations and analysis
- innovating and creating solutions to engineering-related contingencies
- verifying machine and equipment performance against specifications after installation, commissioning or modification on at least two occasions
- communicating, negotiating and reviewing with stakeholders and client throughout installation, commissioning or modification process.

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:

- typical features of, and processes for machine and equipment:
 - installation
 - commissioning
 - modification
- appropriate technical personnel and professionals

- purpose of systems typically found in modern machinery and equipment including:
 - hydraulics
 - pneumatics
 - electrical motors, electrical supply and associated equipment
 - electronics, mechatronics and other control systems
 - mechanical transmissions, including gears, shafts and clutches
- force and stress analysis techniques
- requirements for, and functions of:
 - technical documentation
 - graphics and specifications
 - records of meetings
 - communications, negotiations, decisions and agreements with stakeholders
- WHS requirements, codes of practice, regulations, standards, and regulatory requirements for project or operations
- risk management and reduction, current safe work method statements (SWMS), safety data sheets (SDS) and work permits
- professional and ethical practice
- conflict resolution, problem-solving and decision-making.
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Assessment Conditions

- Assessors must:
 - have vocational competency in managing installation, commissioning or modification of machines and equipment or projects 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 found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>