



Australian Government

**Assessment Requirements for MEM23120
Select mechanical machine and equipment
components**

Release: 1

Assessment Requirements for MEM23120 Select mechanical machine and equipment components

Modification History

Release 1. Supersedes and is equivalent to MEM23120A Select mechanical machine and equipment components.

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:

- evaluating machine components and arrangements for compliance with work health and safety (WHS) and regulatory requirements and risk assessment
- determining component arrangement, limits, fits and clearances, assembly, fastening and alignment of components
- investigating sustainability implications of components selection task
- reviewing features and functions of machine and equipment components
- reviewing design loads, working stresses, allowable deformations and factor of safety, component arrangements, limits and fits, assembly, adjustment and fastening methods required by the task on at least two occasions
- identifying relevant analysis support including graphs, tables, nomograms or computer-aided solutions and validation techniques
- selecting and specifying machine components on at least two occasions, including arrangement and assembly requirements
- reporting and documenting results of component selection, including calculations, specifications, diagrams and drawings.

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:

- WHS and regulatory requirements, codes of practice, standards and risk management requirements relevant to mechanical component selection processes
- machine and equipment mechanical components
- technical and professional assistance
- current options and trends in performance analysis software including underpinning program techniques and software validation techniques
- properties of common machine and component materials.
-

Assessment Conditions

- Assessors must:
 - have vocational competency in selecting mechanical machine and equipment components 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.
-

Links

Companion Volume implementation guides are found in VETNet -

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