



Australian Government

Assessment Requirements for MEM23123

Evaluate manufacturing processes

Release: 1

Assessment Requirements for MEM23123 Evaluate manufacturing processes

Modification History

Release 1. Supersedes and is equivalent to MEM23123A Evaluate manufacturing processes.

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 and functions of manufacturing processes including manufacturing principles and techniques used and relevant internal and external context of manufacturing processes
- identifying and applying relevant lean systems and techniques in evaluation of manufacturing processes
- evaluating work health and safety (WHS), regulatory, automation safety and risk management compliance
- investigating sustainability implications of manufacturing processes
- evaluating software, facilities, services, plant and equipment tooling, process layout, automation and process control on at least two occasions
- identifying appropriateness of materials and product flow and transfer operations, buffer and emergency stocks, warehousing, stores and compatibility of maintenance management system on at least two occasions
- reporting and documenting results of evaluation with required layouts, programs and flow charts.

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:

- evaluation parameters
- technical and professional assistance
- context of manufacturing processes
- important features of products and processing options with regard to:
 - marketing options and advantages
 - economic, social and sustainability implications of products and processes
 - WHS and other regulatory requirements
- plant, facilities, services and process layout
- common modern manufacturing technical and work organisation processes including:
 - volume production using transfer lines

- cellular manufacturing
- jobbing
- metal shaping processes including casting, forging and machining
- metal assembly, fabricating and joining
- plastic and rubber product manufacturing including various types of moulding and assembly
- surface finishing-based processes
- process transfers and materials handling
- packaging
- warehousing, stores, and provision for logistics and transport
- labour and skills distribution requirements of plant and processes
- asset maintainability and reliability concepts and processes
- process automation and control options
- techniques for process improvement including:
 - material and product flow measurement and improvement
 - feedback on product manufacturability for possible product modification
 - feedback from maintenance and life cycle costs for plant
 - quality assurance (QA), quality control (QC) and statistical process control (SPC) feedback
 - customer feedback on cost, quality, delivery and reliability
- maintenance management systems and compatibility with manufacturing processes
- information flows and software options for process measurement and control
- budgeting and costing processes
- WHS, risk management, safe work method statements (SWMS), work permits, safety data sheets (SDS), codes of practice, regulations, standards and regulatory requirements.
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Assessment Conditions

- Assessors must:
 - have vocational competency in evaluating manufacturing processes 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>