



Australian Government

MEM30024 Participate in quality assurance techniques

Release: 1

MEM30024 Participate in quality assurance techniques

Modification History

Release 1. Supersedes and is equivalent to MEM30024A Participate in quality assurance techniques.

Application

This unit of competency defines the skills and knowledge required to participate in quality improvement programs at a basic level. It includes interpreting and applying quality standards and procedures, monitoring and reporting on quality and assisting in implementing approved improvement strategy or strategies.

The unit applies to engineering or related activities and is suitable for people giving technical support in manufacturing or engineering operations and those pursuing technical qualifications and careers at paraprofessional or technician level. All work is carried out under supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

MEM12024 Perform computations

MEM13015 Work safely and effectively in manufacturing and engineering

MEM15001 Perform basic statistical quality control

MEM16006 Organise and communicate information

Competency Field

Engineering technician

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. Interpret and apply quality standards and procedures	1.1 Follow standard operating procedures (SOPs) and comply with work health and safety (WHS) requirements at all times 1.2 Interpret quality standards and procedures and apply to individual work and team activities

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
2. Monitor and report on quality	2.1 Monitor quality of all received, in-work and finished materials and products in accordance with SOPs 2.2 Use designated process improvement tools either individually or in a team to identify and solve quality problems 2.3 Use designated analytical tools to evaluate principal causes of process variation in consultation with the team or other subject experts 2.4 Recommend further action to improve quality where required
3. Assist in implementing approved improvement strategy or strategies	3.1 Establish key indicators and performance measures and agree in consultation with the team or other subject experts 3.2 Measure process and product output against key indicators in consultation with the team or other subject experts 3.3 Take steps to lock in improvements according to scope of own job role

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.

Quality standards and procedures include:	- quality programs - quality policy - quality manuals - ISO 9000 and associated quality standards.
Process improvement tools include one or more of the following:	- process flow charts - cause and effect diagrams - brainstorming sessions - Pareto diagrams

	• check sheets • run chart • scatter diagrams.
Analytical tools include one or more of the following:	• statistical analysis • critical incident analysis • root cause analysis (RCA).

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM30024A Participate in quality assurance techniques.

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for MEM30024 Participate in quality assurance techniques

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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:

- participating in quality assurance programs on at least two occasions
- interpreting and applying quality standards and procedures
- monitoring and reporting on quality
- using designated process improvement analytical tools on at least two occasions
- assisting in implementing approved improvement strategy or strategies.

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:

- importance of quality
- key principles of quality improvement programs
- influence of variation
- use and application of Australian Standards and International Organization for Standardization (ISO) 9000
- quality policy
- quality manuals
- quality procedures
- quality definitions
- purpose of quality audits
- simple sampling techniques and possible sources of sampling error and bias
- simple statistical tools
- process improvement tools
- analytical tools
- problem solving techniques including:
 - process flow charts, interpretation and construction of simple case
 - cause and effect diagrams and fault trees

- root cause analysis (RCA)
- Pareto diagrams.
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Assessment Conditions

- Assessors must:
 - have vocational competency in participating in quality assurance techniques 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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