



Australian Government

MEM07025 Perform advanced machine and process operation

Release: 1

MEM07025 Perform advanced machine and process operation

Modification History

Release 1. Supersedes and is equivalent to MEM07025B Perform advanced machine or process operation

Application

This unit of competency defines the skills and knowledge required to perform advanced operation and monitor a machine or process recognising and rectifying deviations and faults.

It relates to where the output of the machine or process can be varied at the discretion of the operator and where recognition/rectification skills are applied based upon product/material/process knowledge to achieve specified outcomes.

Where operational maintenance is required to be performed unit MEM07001 Perform operational maintenance of machines/equipment should also be selected.

Where diagnosis and rectification of advanced plastic processes is required unit MEM07026 Perform advanced plastic processing should also be selected.

Where diagnosis and rectification of advanced press operations is required unit MEM07027 Perform advanced press operations should also be selected.

When production packaging and labelling of the finished goods or product is required unit MEM11006 Perform production packaging should also be selected.

Where the selection and use of power tools/hand held operations is required unit MEM18002 Use power tools/hand held operations should also be selected.

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

Band: A

Unit Weight: 6

Pre-requisite Unit

MEM07024	Operate and monitor machine and process
MEM09002	Interpret technical drawing
MEM11011	Undertake manual handling
MEM12023	Perform engineering measurements
MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information

MEM18001

Use hand tools

Competency Field

Machine and process operations

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

- | | | | |
|---|-----------------------------------|-----|---|
| 1 | Determine job requirements | 1.1 | Follow standard operating procedures (SOPs) |
| | | 1.2 | Comply with work health and safety (WHS) requirements at all times |
| | | 1.3 | Use appropriate personal protective equipment (PPE) in accordance with SOPs |
| | | 1.4 | Identify job requirements from specifications, drawings, job sheets or work instructions, including machine or process selection and settings |
| | | | |
| 2 | Conduct pre-start checks | 2.1 | Check safety equipment and guards for correct position and operation |
| | | 2.2 | Undertake programmed operational maintenance according to procedures |
| | | 2.3 | Undertake pre-start checks to SOPs |
| | | 2.4 | Verify equipment, raw material and tooling to match task requirement |
| | | | |
| 3 | Operate machine or process | 3.1 | Start up machine or process in accordance with SOPs |
| | | 3.2 | Operate machine or process in accordance with job instructions |
| | | 3.3 | Load components/feed stock and maintain consistent with production requirements |

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

		3.4	Unload machine or process output using appropriate manual handling techniques
		3.5	Handle machine or process output and store in a manner not likely to cause damage
		3.6	Record production data to SOPs
4	Monitor machine or process	4.1	Monitor machine or process for safe and correct operation
		4.2	Follow emergency procedures in accordance with SOPs
5	Recognise and rectify deviations and faults in raw material, product, process and equipment	5.1	Recognise faults/deviations from standard operating procedures, job sheets or other documentation
		5.2	Rectify faults/deviations in accordance with SOPs, job sheets or other documentation
		5.3	Adjust machine or process settings within parameters, as required

Foundation Skills

This section describes those required skills (reading, writing, oral communication and numeracy) that are essential to workplace performance in this unit of competency.

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, accessibility of the item, and local industry and regional contexts) are included.

Machine/process uses include one (1) or more of the following:

- pressing
- punching
- plastic moulding
- extruding

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, accessibility of the item, and local industry and regional contexts) are included.

- bending
- joining
- rolling
- forming
- drawing
- metal removal
- pickling
- cylinder filling
- printing
- painting

**Faults/deviations
include one (1) or more
of the following:**

- product/output
- machine
- raw material or feed stock
- tooling
- process equipment
- process

Unit Mapping Information

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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>

Assessment Requirements for MEM07025 Perform advanced machine and process operation

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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 on at least two (2) occasions and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- identifying and interpreting specifications, drawings and other applicable reference documents in performing advanced machine and process operations
- undertaking pre-start checks of a machine or process
- undertaking appropriate manual handling in loading, unloading and storing of finished work without damage
- operating a machine or process and determining required adjustments to process
- recording production data in accordance with standard operating procedures
- identifying and rectifying faults/deviations in raw material, product, process and equipment from specifications, as required.

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:

- safe work practices and procedures and use of personal protective equipment (PPE)
- machine and process documentation requirements including production recording and reporting requirements
- required pre-start checks of a machine or process
- machine or process start-up and unloading procedures
- reasons and procedures for programmed operational maintenance
- necessary component/feed stock levels to ensure continuous process
- types of raw material, product, process and equipment fault/deviations and corrective actions
- procedures to be followed in emergency situations
- consequences of improper handling and storing of finished work.

Assessment Conditions

- Assessors must:

- have vocational competency in performing advanced machine and process operations 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. This must 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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