



Australian Government

MEM07024 Operate and monitor machine and process

Release: 1

MEM07024 Operate and monitor machine and process

Modification History

Release 1. Supersedes and is equivalent to MEM07024B Operate and monitor machine/process

Application

This unit of competency defines the skills and knowledge required to operate and monitor a machine and process and applies to a range of production operations or continuous processes.

The work is performed in accordance with clear step-by-step instructions and procedures documented on job sheets or similar process instruction documents.

Operational adjustments to the machine or process by the operator are made using external controls. Basic operation (excluding setting and tool adjustments) of computer numerically controlled (CNC) machines is also covered by this unit.

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

Where the interpretation of technical drawings is required unit MEM09002 Interpret technical drawing should also be selected.

Where 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 engineering measurement is required unit MEM12023 Perform engineering measurements should also be selected.

Where the selection and use of tools is required unit MEM18001 Use hand tools and unit MEM18002 Use power tools/hand held operations, should also be selected as appropriate.

This unit should not be selected with any of the following units unless the skills of this unit are being applied to an additional and different type of machine and or process:

- MEM04001 Operate melting furnaces
- MEM04002 Perform gravity die casting
- MEM04003 Operate pressure die casting machine
- MEM04006 Operate sand moulding and core making machines
- MEM06001 Perform hand forging
- MEM06002 Perform hammer forging
- MEM08001 Perform wire, jig and barrel load/unload work
- MEM08004 Finish work using wet, dry and vapour deposition methods
- MEM08008 Operate and control surface finishing waste treatment process

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

Band: A

Unit Weight: 4

Pre-requisite Unit

MEM11011	Undertake manual handling
MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information

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, job sheets or work instructions
2	Conduct pre-start checks	2.1	Undertake pre-start checks to SOPs
		2.2	Observe safety procedures and check all safety equipment for correct operation
3	Operate machine/process	3.1	Start up machine or process in accordance with SOPs
		3.2	Operate machine or process in accordance with job instructions

Elements describe the essential outcomes.

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

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| | | 3.3 | Load components/feed stock and maintain consistent with production requirements |
| | | 3.4 | Unload machine or process |
| | | 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/process | 4.1 | Monitor machine or process for safe and correct operation |
| | | 4.2 | Identify deviations and faults and report in accordance with procedures |
| | | 4.3 | Follow emergency procedures in accordance with SOPs |

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.

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| Machine/process uses include one (1) or more of the following: | <ul style="list-style-type: none"> • pressing • punching • plastic moulding • extruding • bending • joining • rolling • forming • drawing |
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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.

- metal removal
- pickling
- cylinder filling
- printing
- painting

Production data includes one (1) or more of the following:

- production schedules
- job sheets
- checklists

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM07024B Operate and monitor machine/process

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 MEM07024 Operate and monitor machine and process

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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
- interpreting machine/process instruction and setting up for production
- conducting pre-start checks
- operating the machine or process, loading and unloading in accordance with procedures
- following emergency procedures, as required
- completing production data onto applicable workplace forms
- monitoring the machine or process, identifying any faults or out-of-specification operation and reporting, 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 pre-start checks
- machine or process start-up and unloading procedures
- component/feed stock levels to ensure continuous process
- production recording and reporting requirements
- types of product faults and deviations
- consequences of improper handling and storing of finished work
- procedures to be followed in emergency situations.

Assessment Conditions

- Assessors must:
 - have vocational competency in operating and monitoring machine and process 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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