



Australian Government

MEM07026 Perform advanced plastic processing

Release: 1

MEM07026 Perform advanced plastic processing

Modification History

Release 1. Supersedes and is equivalent to MEM07026B Perform advanced plastic processing

Application

This unit of competency defines the skills and knowledge required to produce products using advanced plastic processing equipment.

It relates to operations 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.

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 the match of task requirements against equipment, raw material and tooling |
| | | | |
| 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 |
| | | 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 |

Elements describe the essential outcomes.

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

		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 product/output, raw material/feed stock, tooling and machine or process	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.

Plastic and rubber processing include one (1) or more of the following:

- injection
- blow moulding
- processing of fibre reinforced composites
- extrusion
- thermoforming
- vacuum forming
- foaming

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Product faults/deviations include one (1) or more of the following:

- short shots
- warped mouldings
- dimensional errors

Raw materials faults/deviations include one (1) or more of the following:

- contamination
- colour variation

Tooling faults/deviations include one (1) or more of the following:

- blemishes
- missing detail

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

- short shots
- burn marks
- distortion

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 MEM07026 Perform advanced plastic processing

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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, charts, lists and other workplace documents in performing advanced plastic processing
- undertaking pre-start checks of a machine or process, including checking of safety equipment and guards
- 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 SOPs
- identifying and rectifying faults/deviations in product, raw materials, tooling and machine/process.

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)
- safety features of the machine or process equipment being operated
- programmed operational maintenance requirements of the machine or process
- pre-start checks and start-up/shutdown procedures
- operating procedures for plastic processing machinery and equipment
- unloading procedures for plastics processing and procedures for handling and storing finished work
- consequences of improper handling and storing
- recording requirements for plastic processing operations
- emergency procedures
- plastic product fault/deviations and corrective action to rectify types of product fault/deviations, raw material faults/deviations and tooling faults/deviations
- deviations and faults in machine or process and the correct action to rectify machine or process faults/deviations.

Assessment Conditions

- Assessors must:
 - have vocational competency in performing advanced plastic processing 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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