



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **MEM07026B Perform advanced plastic processing**

**Release: 1**

## MEM07026B Perform advanced plastic processing

### Modification History

Not Applicable

### Unit Descriptor

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| <b>Unit descriptor</b> | This unit covers producing products using advanced plastic processing equipment. |
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### Application of the Unit

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| <b>Application of the unit</b> | <p>This unit applies to a range of plastic, rubber processing including injection, blow moulding, processing of fibre reinforced composites, extrusion, thermoforming, vacuum forming, foaming etc.</p> <p>This unit relates to operations where the output of the machine/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.</p> <p>Where interpretation of a technical drawing to Australian Standard 1100/1102 or equivalent is required, Unit MEM09002B (Interpret technical drawing) should also be selected. When production packaging and labelling of the finished goods or product is required, then Unit MEM11006B (Perform production packaging) should also be considered.</p> <p><b>Band: A</b></p> <p><b>Unit Weight: 6</b></p> |
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### Licensing/Regulatory Information

Not Applicable

## Pre-Requisites

| Prerequisite units |           |                                                       |
|--------------------|-----------|-------------------------------------------------------|
| <b>Path 1</b>      | MEM07001B | Perform operational maintenance of machines/equipment |
|                    | MEM07024B | Operate and monitor machine/process                   |
|                    | MEM09002B | Interpret technical drawing                           |
|                    | MEM12023A | Perform engineering measurements                      |
|                    | MEM16006A | Organise and communicate information                  |
|                    | MEM18001C | Use hand tools                                        |

## Employability Skills Information

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| <b>Employability skills</b> | This unit contains employability skills. |
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## Elements and Performance Criteria Pre-Content

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| Elements describe the essential outcomes of a unit of competency. | Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide. |
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## Elements and Performance Criteria

| ELEMENT                                                                     | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Determine job requirements                                               | 1.1. Drawings, job instructions and specifications are interpreted and task requirements are understood including machine/process selection and settings.                                                                                                                                                                                                                                                                                                                                                                               |
| 2. Observe safety precautions                                               | 2.1. Safety equipment and guards are checked for correct position and operation.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 3. Conduct pre-start checks                                                 | 3.1. Programmed operational maintenance is undertaken to standard operating procedures.<br>3.2. Pre-start checks are undertaken to standard operating procedures.<br>3.3. The match of task requirements against equipment, raw material and tooling is verified.                                                                                                                                                                                                                                                                       |
| 4. Operate machine/process                                                  | 4.1. Machine/process is started up safely and correctly.<br>4.2. Machine/process is operated in accordance with job instructions or standard operating procedures.<br>4.3. Components/feed stock are loaded and maintained consistent with production requirements.<br>4.4. Machine/process output is unloaded safely to standard operating procedures.<br>4.5. Machine/process output is handled and stored in a manner not likely to cause damage, as required.<br>4.6. Production data is recorded to standard operating procedures. |
| 5. Monitor machine/process                                                  | 5.1. Machine/process is monitored for safe and correct operation.<br>5.2. Emergency procedures are understood and followed in accordance with standard operating procedures.                                                                                                                                                                                                                                                                                                                                                            |
| 6. Recognise and rectify deviations and faults in product/output            | 6.1. Product faults/deviations such as short shots, warped mouldings and dimensional errors are recognised from standard operating procedures, job sheets or other documentation.<br>6.2. Product faults/deviations are rectified in accordance with standard operating procedures, job sheets or other documentation and may be achieved by adjustment of machine/process settings within parameters.                                                                                                                                  |
| 7. Recognise and rectify deviations and faults with raw material/feed stock | 7.1. Raw material faults/deviations such as contamination, colour variation are recognised from standard operating procedures, job sheets or other documentation.                                                                                                                                                                                                                                                                                                                                                                       |

| ELEMENT                                                           | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                   | 7.2.Raw material faults/deviations are rectified in accordance with standard operating procedures, job sheets or other documentation.                                                                                                                                                                                               |
| 8. Recognise and rectify deviations and faults in tooling         | <p>8.1.Tooling faults/deviations resulting in blemishes, missing detail etc. are identified against specification and reported to standard operating procedure.</p> <p>8.2.Tooling faults/deviations are rectified in accordance with standard operating procedures, job sheets or other documentation.</p>                         |
| 9. Recognise and rectify deviations and faults in machine/process | <p>9.1.Machine/process faults/deviations such as short shots, burn marks, distortion etc. are recognised from standard operating procedures, job sheets or other documentation.</p> <p>9.2.Machine/process faults/deviations are rectified in accordance with standard operating procedures, job sheets or other documentation.</p> |

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Look for evidence that confirms skills in:

- checking for conformance to specifications
- checking and clarifying task-related information
- reading, interpreting and following information on written job instructions standard operating procedures, charts, lists and other standard workplace documents
- following verbal instructions
- orally reporting routine information
- entering routine and familiar information onto proformas and standard workplace forms
- checking safety equipment and guards
- performing programmed operational maintenance
- completing pre-start checks
- checking equipment, raw material and tooling for serviceability
- starting, operating and shutting down machine/process
- loading components/feed stock

**REQUIRED SKILLS AND KNOWLEDGE**

- unloading machine/process output
- handling machine/process output
- completing production records
- monitoring operation of the machine/process
- identifying faults/deviations in product, raw materials, tooling and machine/process
- taking corrective action to correct faults/deviations in product, raw materials, tooling and machine/process

**Required knowledge**

Look for evidence that confirms knowledge of:

- safety features of the machine/process being operated
- safety equipment associated with the machine/process
- the programmed operational maintenance requirements of the machine/process
- pre-start checks
- start-up/shut-down procedures
- operating procedures
- unloading procedures
- procedures for handling and storing finished work
- consequences of improper handling and storing
- recording requirements
- the emergency procedures
- product fault/deviations
- the corrective action to rectify types of product fault/deviations
- raw material faults/deviations
- the correct action to rectify raw material faults/deviations
- tooling faults/deviations
- the correct action to rectify tooling faults/ deviations
- deviations and faults in machine/process
- the correct action to rectify machine/process faults/deviations
- hazards and control measures, including housekeeping
- use and application of personal protective equipment
- safe work practices and procedures

## Evidence Guide

### EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

A person who demonstrates competency in this unit must be able to perform advanced plastic processing. Competency in this unit cannot be claimed until all prerequisites have been satisfied.

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.

#### Context of and specific resources for assessment

This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with advanced plastic processing or other units requiring the exercise of the skills and knowledge covered by this unit.

#### Method of assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning should not require language, literacy and numeracy skills beyond those required in this unit. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

**EVIDENCE GUIDE****Guidance information for  
assessment****Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

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**Unit Sector(s)**

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| <b>Unit sector</b> |  |
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**Co-requisite units**

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| <b>Co-requisite units</b> |  |  |
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**Competency field**

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| <b>Competency field</b> | Machine and process operations |
|-------------------------|--------------------------------|