



**Australian Government**

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

# **PMC552045C Operate container forming equipment**

**Revision Number: 1**

## PMC552045C Operate container forming equipment

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit of competency covers the operation of forming equipment used for the manufacture of glass containers (e.g. bottles and jars). It involves checking line setup, checking quality and supply of raw materials, monitoring and fine tuning the process and rectifying routine problems.
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit of competency applies to operators who are responsible for operating container forming equipment within the manufactured mineral products industry.</p> <p>This unit does NOT apply to the operation of furnaces used for primary glass production or the forming of glass products directly from the melting furnace, which is covered by <i>PMC552040C Operate glass melting process</i>.</p> <p>This competency includes the operation of all ancillary equipment. It does NOT include melting, furnace or raw materials, annealing lehr and packing and handling.</p> <p>This competency is typically performed by operators working either independently or as part of a work team. At all times they would be liaising with other members of the team.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

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

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. Prepare formation equipment	1.1. Interpret job specifications and check the appropriate line/equipment is setup correctly 1.2. Ensure glass feed is at the correct temperature 1.3. Check that production aids and materials are suitable and available for production run 1.4. Undertake equipment preparation and checks according to procedures
2. Fine tune forming processes	2.1. Conduct checks according to equipment procedures 2.2. Make machinery and equipment adjustments to ensure that job specifications are met
3. Form the products	3.1. Monitor equipment to ensure that quality specifications are met 3.2. Make operation adjustments according to procedures to maintain product quality 3.3. Conduct product sampling and quality control checks according to procedures to ensure and maintain the forming specifications 3.4. Use and observe ancillary equipment and safety procedures in accordance with enterprise requirements 3.5. Document and maintain records and production results according to procedures 3.6. Identify processing problems and report to a designated person for rectification
4. Rectify routine problems	4.1. Identify the range of faults that can occur during the operation 4.2. Determine and rectify fault causes in accordance with procedures 4.3. Identify and rectify equipment failure causes in accordance with procedures 4.4. Ensure appropriate records and log books of equipment operations are maintained to meet procedures 4.5. Identify non-routine problems and report to designated person
5. Control hazards	5.1. Identify hazards from the job to be done 5.2. Identify other hazards in the work area 5.3. Assess the risks arising from those hazards 5.4. Implement measures to control those risks in line

ELEMENT	PERFORMANCE CRITERIA
	with procedures

## Required Skills and Knowledge

<b>REQUIRED SKILLS AND KNOWLEDGE</b>
This section describes the skills and knowledge required for this unit.
<b>Required skills</b>
Required skills include: <ul style="list-style-type: none"> <li>• recognising process conditions which will lead to out of specification production</li> <li>• implementing the enterprise's standard procedures and work instructions and relevant regulatory requirements within appropriate time constraints and in a manner relevant to the operation of the equipment</li> <li>• reading and numeracy to interpret workplace documents and technical information</li> </ul>
<b>Required knowledge</b>
Required knowledge includes: <ul style="list-style-type: none"> <li>• basics of glass</li> <li>• independent section (IS) machine and mould operation</li> <li>• forming processes (blow and blow, press and blow, narrow neck press and blow)</li> <li>• swabbing</li> <li>• inspection, quality procedures and records</li> <li>• distinguish between causes of faults such as:                             <ul style="list-style-type: none"> <li>• heat and temperature</li> <li>• dies and forming</li> <li>• other equipment faults</li> </ul> </li> </ul>

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>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.</p>	
<p><b>Overview of assessment</b></p>	<p>The unit will be assessed in as holistic a manner as is practical and may be integrated with the assessment of other relevant units of competency.</p>
<p><b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b></p>	<p>It is essential that the equipment be understood and that the importance of critical material properties and settings is known. Competence must be demonstrated in the ability to recognise and analyse potential situations requiring action and then in implementing appropriate corrective action.</p> <p>Consistent performance should be demonstrated. In particular look to see that:</p> <ul style="list-style-type: none"> <li>• production rates are acceptable</li> <li>• product meets specification</li> <li>• procedures are carried out to requirements and timing (e.g. swabbing)</li> <li>• work area meets occupational cleanliness and hygiene standards.</li> </ul> <p>Competence must be demonstrated in the operation of all ancillary equipment to the level required for this unit of competency.</p>
<p><b>Context of and specific resources for assessment</b></p>	<p>Assessment will require access to an operating plant over an extended period of time, or a suitable method of gathering evidence of operating ability over a range of situations.</p> <p>Assessment will occur over a range of situations which will include disruptions to normal, smooth operation.</p> <p>Simulation or case studies/scenarios may be required to allow for timely assessment of parts of this unit of competency. Simulation should be based on the actual plant and will include 'walk-throughs' of the relevant competency components. A bank of scenarios/case studies/what ifs and questions will be required to probe the reasoning behind observable actions.</p>
<p><b>Method of assessment</b></p>	<p>In all plants it may be appropriate to assess this unit concurrently with relevant teamwork and communication</p>

<b>EVIDENCE GUIDE</b>	
	<p>units.</p> <p>This unit may be assessed in conjunction with:</p> <ul style="list-style-type: none"><li>• <i>MSAPMOPS212A Use enterprise computers or data systems.</i></li></ul> <p>Individual enterprises may choose to add prerequisites and co-requisites relevant to their processes.</p>
<b>Guidance information for assessment</b>	Assessment processes and techniques must be culturally appropriate and appropriate to the language and literacy capacity of the candidate and the work being performed.

## Range Statement

<b>RANGE STATEMENT</b>	
<p>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.</p>	
<b>Procedures</b>	All operations are performed in accordance with standard procedures and work instructions
<b>Equipment</b>	<p>Equipment may include:</p> <ul style="list-style-type: none"> <li>• fore hearth</li> <li>• feeders and delivery</li> <li>• independent section (IS) forming machines</li> <li>• ware handling equipment (e.g. conveyors)</li> <li>• hot end inspection equipment</li> </ul>
<b>Typical problems</b>	<p>Typical problems may include:</p> <ul style="list-style-type: none"> <li>• container weight off specification</li> <li>• container sizes not meeting specification</li> <li>• equipment breakdown</li> </ul>
<b>Occupational health and safety (OHS)</b>	All operations are subject to stringent OHS requirements and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and OHS requirements, the OHS requirements take precedence

## Unit Sector(s)

<b>Unit sector</b>	Operational/technical
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## Competency field

<b>Competency field</b>	
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## Co-requisite units

<b>Co-requisite units</b>		