



Australian Government

PMBPROD330E Make moulds for thermoformed products

Release: 1

PMBPROD330E Make moulds for thermoformed products

Modification History

Release 1. Unit code and title changed. Application changed. Elements and Performance Criteria changed. Range of Conditions removed. Assessment Requirements changed. Supersedes and is equivalent to PMBPROD330 Make moulds for formed products.

Application

This unit describes the skills and knowledge required to make moulds used in thermoformed polymer production.

This unit applies to an experienced technician working alone or as part of a team.

The unit principally refers to the family of mould construction techniques and materials that can be applied to both small and large products, and both high or low production output situations.

No licensing or certification requirements exist at the time of publication. Relevant legislation, industry standards and codes of practice within Australia must be applied.

Pre-requisite Unit

Nil

Competency Field

Production – Plastics Fabrication

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Plan work requirements	1.1 Identify requirements from job specifications 1.2 Organise for mould design to be put into operation according to workplace procedures 1.3 Identify processes used for production from job specifications 1.4 Perform pre-operational checks including checking for and controlling hazards 1.5 Identify and assemble required personal protective equipment (PPE) 1.6 Identify checks and testing processes required for equipment,

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	materials, quality and production management 1.7 Identify waste management strategies to collect excess, discarded or nonconforming materials to be disposed of, recycled or reprocessed according to workplace procedures
2. Construct moulds or patterns	2.1 Construct initial rough assembly based on job specifications 2.2 Establish shape to project dimensions 2.3 Apply filler or surfacer materials as required by job specifications 2.4 Finish to required standard 2.5 Provide vacuum or vent passages
3. Produce sample product from moulds	3.1 Produce sample product from job specifications 3.2 Check dimensions and finish against job specifications and quality standards 3.3 Adjust mould or pattern to meet job specifications and quality standards
4. Anticipate and solve process control variances	4.1 Recognise existing or potential process control variances and their causes 4.2 Determine, prioritise and implement remedial and preventative actions based on identified issues and causes 4.3 Monitor process control variances and corrective actions taken until resolved 4.4 Accurately maintain records and logbooks

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

- Numeracy skills to interpret technical information.
- Reading skills to interpret specifications and workplace procedures.
- Writing and oral communication skills to record and report on mould production.

Other foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Supersedes and is equivalent to PMBPROD330 Make moulds for formed products.

Links

Companion Volume implementation guides are found in VETNet – -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=932aacef-7947-4c80-acc6-593719fe4090>

Assessment Requirements for PMBPROD330E Make moulds for thermoformed products

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Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- make moulds for thermoformed products at least once to meet job specifications.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- key requirements of the product design that impact on the mould construction
- characteristics and property differences of mould construction materials
- types of finish and surfaces and how to achieve them
- the criteria for overall process/equipment readiness for the process or equipment being used
- typical quality standards required at each stage of production
- key variables that may affect product quality and production output
- typical and atypical process and product problems, including early warning signs, possible causes and corrective actions
- the distinguishing characteristics of causes of problems as being either based on the properties of materials or caused by process variables
- organisational procedures relevant to the work environment or job role
- hazards that may arise in the job or work environment, and:
 - their possible causes
 - potential consequences
 - appropriate risk controls.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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