

Australian Government

Assessment Requirements for PMBPROD310E Produce injection moulded products

Release: 1

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Modification History

Release 1. Unit code changed. Application changed. Elements and Performance Criteria changed. Range of Conditions removed. Assessment Requirements changed. Supersedes and is equivalent to PMBPROD310 Produce injection moulded products.

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:

• produce injection moulded products at least once to meet job specifications.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- the functions and principles of operation of injection moulding equipment
- the functions and principles of operation of injection moulding machine components, including:
 - material supply systems
 - plastification units
 - dies/tools
 - injection units
- the functions and principles of operation of ancillary equipment integral to the process, including:
 - chillers
 - die heating equipment
 - hopper driers
 - mixing hoppers
 - dehumidifying driers
 - air compressors
 - dosing machines
 - blending and mixing equipment
 - conveyors
- mechanical, hydraulic, pneumatic, electrical and electronic principles that affect machine operation
- the criteria for overall process/equipment readiness for the process or equipment being used
- injection moulding production features and workflow sequences

- how to calculate injection moulding machine size and injection unit capacity to ensure appropriate equipment selection
- characteristics and properties of materials and their behaviour in relation to process conditions
- typical quality standards required at each stage of production
- key variables that may affect product quality and production output, including:
 - · variations in raw materials and equipment operation
 - machine conditions
 - production rate
 - product integrity and conformance to minimum acceptable end-user standards
- typical and atypical process and product problems, including early warning signs, possible causes and corrective actions
- methods and materials for purging equipment, and their combinations and applications
- organisational procedures relevant to the work environment and job role, including procedures for the emergency shutdown of equipment
- 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.

Links

Companion Volume implementation guides are found in VETNet – https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=932aacef-7947-4c80-acc6-593719fe4090