



**Australian Government**

# **PMBPREP304E Set a die for injection moulding production**

**Release: 1**

# PMBPREP304E Set a die for injection moulding production

## 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 PMBPREP304 Set a die.

## Application

This unit describes the skills and knowledge required to remove, refit and set approved and operational dies used in injection moulding.

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

The unit principally refers to an in-production changeover of the die or mould to make a new product, using dies or moulds that have been trialled and have approved set-up specifications.

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

Preparation – Injection Moulding

## 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. Prepare to change dies	1.1 Determine when changeover will be required, and plan requirements for die change 1.2 Prepare dies and all required cores, parts, tools and equipment related to changing dies according to plan 1.3 Prepare moulding machine for shutdown and die removal according to plan 1.4 Take last-off samples from machine to inform die reports 1.5 Shut down machine according to machine specifications 1.6 Prepare machine for changeover according to workplace procedures

<b>Elements</b>	<b>Performance Criteria</b>
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	1.7 Plan a safe die removal process that meets workplace safety standards
2. Change dies	2.1 Remove, clean and store die according to workplace procedures 2.2 Assess die to establish if corrosion protection is required 2.3 Attach replacement die, ensuring that locating devices and marks are matched and securing devices are installed and tightened according to specifications
3. Set dies	3.1 Set machine conditions for new die according to machine specifications 3.2 Start up machine according to workplace procedures 3.3 Run machine and die through dry cycle according to workplace procedures 3.4 Check installation and operation of die against product quality specifications and expected operation standards 3.5 Check a first-off sample for compliance with required standards 3.6 Fine-tune settings and other production variables to improve output compliance 3.7 Ensure workplace documentation is up-to-date, including noting any equipment variances between actual production and documented set-up conditions
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 Identify possible system or process improvements and make recommendations to relevant personnel

## Foundation Skills

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

- Numeracy skills to interpret technical specifications and equipment readings.
- Reading skills to interpret specifications and workplace procedures.
- Writing and oral communication skills to record and report on equipment set-up and process control variances.

*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 PMBPREP304 Set a die.

## **Links**

Companion Volume implementation guides are found in VETNet – -

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