



Australian Government

PMBTECH303E Make minor modifications to 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 PMBTECH303 Make minor modifications to products.

Application

This unit covers the skills and knowledge required to make minor modifications to an existing product to incorporate small changes to size, shape or surface finish for product and process improvement purposes.

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

The unit principally refers to minor modifications being required for a moulded product to optimise its function or the processing and moulding operations associated with its production.

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

Technical

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. Confirm requirements for product modification	1.1 Check product specifications for completeness and clarity to confirm understanding of requirements 1.2 Investigate options for types of modifications that meet product specifications and fall within plant, equipment and tooling availability and workplace procedures 1.3 Identify tests required on trial product to demonstrate validity of product or process improvements
2. Identify similar existing	2.1 Identify existing products with similar specifications as starting

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
products	product base 2.2 Estimate required changes to existing products to achieve desired product outcome 2.3 Check production constraints and work health and safety impacts of proposed changes against job specifications and workplace procedures 2.4 Draft initial product design and manufacturing process for trialling
3. Prepare for trial product production	3.1 Identify and control hazards for pilot or trial production according to workplace procedures 3.2 Verify availability of plant and equipment required in job specifications in readiness for trial product production 3.3 Obtain and prepare all required materials and tooling to support trial production
4. Produce trial product	4.1 Produce trial product according trial product design and manufacturing process, and obtain sample according to workplace procedures 4.2 Organise test of trial product sample according to workplace procedures 4.3 Interpret and analyse test results against trial product design and manufacturing process 4.4 Modify product design or manufacturing process and repeat trials according to workplace procedures
5. Check initial factory trial	5.1 Check availability of required resources and plant availability and obtain required authorities 5.2 Identify and control hazards for factory trial production according to workplace procedures 5.3 Monitor factory trial manufacture of product and obtain sample according to job specifications and workplace procedures 5.4 Interpret factory trial results and interpret implication for production or further testing 5.5 Modify product design or manufacturing process and repeat factory trial until required specifications achieved
6. Complete trial	6.1 Accurately complete trial records and reports

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	6.2 Check that changes to resources and procedures have been incorporated into workplace documentation 6.3 Ensure that any additional work health and safety or skill requirements have been included in forward planning according to workplace procedures

Foundation Skills

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

- Writing and oral communication skills to record and report on trial results.
- Numeracy skills to read, interpret and modify product designs and manufacturing processes.

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 PMBTECH303 Make minor modifications to 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 PMBTECH303E Make minor modifications to 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 of competency, and demonstrated the ability to:

- make minor modifications to at least one product to meet job specifications.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- product features and their impact on product properties
- impacts of different manufacturing methods or processes on product properties
- suppliers and sources of information about materials and tooling
- requirements for factory trialling and scaling up from laboratory and pilot scale
- tests that might be used and the applicability of the different tests for different product properties
- 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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