



Australian Government

PMBTECH509 Modify an existing product

Release: 1

PMBTECH509 Modify an existing product

Modification History

Release 1. Supersedes and is equivalent to PMBTECH509A Modify an existing product

Application

This unit of competency covers the skills and knowledge required to make a major modification to an existing product requiring examination of a broad range of design features. The aims of the modification may be broad (e.g. reduce cost, improve performance, improve manufacturing) or specific (e.g. meet a particular specification).

This unit of competency applies to experienced technicians or those in similar roles who are required to apply in-depth knowledge of materials, process, equipment and problem solving in order to determine the appropriate product specification; confirm the appropriate compound; identify equipment/tooling requirements; monitor trials and check the modified product meets its requirements.

The technician will take the lead role in this development project which may contribute to a larger/more complex project being undertaken by a more senior technician.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Technical

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Confirm required product specification/requirements	1.1	Communicate with stakeholders regarding technical and aesthetic specification and other requirements
		1.2	Identify project constraints, such as timelines and cost
		1.3	Draft product specification and project plan
		1.4	Identify required tests to verify product meets specification
		1.5	Confirm with stakeholders and modify as appropriate
2	Determine requirements for manufacture	2.1	Identify appropriate compound
		2.2	Select process, equipment and tooling
		2.3	Select appropriate process conditions
		2.4	Determine other requirements for manufacture
		2.5	Draft trial manufacturing procedure
		2.6	Identify any health, safety and environment (HSE) issues and modify as appropriate
3	Make trial/prototype products	3.1	Identify and control all hazards for laboratory development program
		3.2	Obtain all required materials and tools/equipment
		3.3	Produce the trial product following the draft procedures
		3.4	Evaluate the product's compliance with requirements
		3.5	Modify design and procedure as appropriate
		3.6	Draft factory trial procedure

- | | | | |
|---|--------------------------------------|-----|---|
| 4 | Monitor factory trials | 4.1 | Identify and control all HSE issues for factory trials |
| | | 4.2 | Ensure all required materials and tools/equipment are available |
| | | 4.3 | Organise trials at an appropriate time |
| | | 4.4 | Ensure trial is monitored and required data collected |
| | | 4.5 | Evaluate factory trial product and procedure |
| | | 4.6 | Modify specification procedure as appropriate |
| | | | |
| 5 | Complete product modification | 5.1 | Ensure final specification and procedures are recorded in standard procedures |
| | | 5.2 | Ensure all required materials and tools and equipment will be routinely available as required |
| | | 5.3 | Ensure HSE controls are standardised |
| | | 5.4 | Ensure skill needs of operators have been addressed |
| | | 5.5 | Complete all required reports and records |
| | | 5.6 | Advise stakeholders of the outcome of the project |

Foundation Skills

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

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

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used.

Applicable legislation, regulations, standards and codes of practice include:

- HSE legislation, regulations and codes of practice relevant to the workplace, materials and processes being used and products being made
- Australian/international standards relevant to the materials being used and products being made
- any relevant licence and certification requirements.

All operations to which this unit applies are subject to stringent HSE requirements, which may be imposed through state/territory or federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and such requirements the legislative requirements take precedence.

Procedures All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or any combination of:

- test procedures
- technical specifications
- technical drawings
- emergency procedures
- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulae/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Unit Mapping Information

Release 1. Supersedes and is equivalent to PMBTECH509A Modify an existing product

Links

MSA Training Package Implementation Guides - <http://mskills.org.au/training-packages/info/>