



Australian Government

PMBTECH406 Diagnose production equipment problems

Release: 1

PMBTECH406 Diagnose production equipment problems

Modification History

Release 1. Supersedes and is equivalent to PMBTECH406A Diagnose production equipment problems

Application

This unit of competency covers the skills and knowledge required to diagnose production equipment problems. It applies to product faults, including reject products and other faults, and production faults/problems.

This unit of competency applies to advanced operators, technicians or those in similar roles who are required to determine the possible causes of product/production faults; investigate the likely equipment, plant and/or process causes of the faults; isolate the most probable cause; recommend the solution and monitor its implementation.

This unit of competency applies to an operator/technician applying specialised theoretical and technical knowledge and well developed skills in situations that require autonomy, discretion and judgement. The operator/technician will take the lead role in the activity but will need to liaise with a range of people at all levels in the organisation to obtain information and to implement the solution. The operator/technician will have detailed operational and process knowledge but is not required to demonstrate 'hands on' operation of equipment as part of this competency.

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	Identify faults in	1.1	Examine products/production process
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| | products/product ion | 1.2 | Identify faults |
| | | 1.3 | Categorise faults according to type/likely cause |
| | | 1.4 | Prioritise faults for action |
| 2 | Determine most probable possible cause(s) of fault | 2.1 | Analyse fault to determine possible causes |
| | | 2.2 | Investigate possible causes to eliminate less probable causes |
| | | 2.3 | Short list probable causes |
| | | 2.4 | Check hypothesis of cause(s) is supported by the data available |
| | | 2.5 | Identify most probable cause |
| 3 | Implement solution to fault | 3.1 | Develop recommended solution to fault |
| | | 3.2 | Check health, safety and environment (HSE) implications of solution and modify solution as appropriate |
| | | 3.3 | Communicate the recommendation as appropriate |
| | | 3.4 | Check recommendation has been understood and can be implemented |
| | | 3.5 | Check all hazard controls are in place |
| | | 3.6 | Monitor progress of implementation |
| | | 3.7 | Modify recommended solution as required |
| 4 | Check fault solution has worked | 4.1 | Monitor product/process for fault |
| | | 4.2 | Monitor HSE impacts of changes |
| | | 4.3 | Repeat analysis and solution process if required |
| | | 4.4 | Update records and procedures to reflect successful solution |

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, manual handling, hazardous materials
- 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:

- technical specifications
- technical drawings
- test procedures
- emergency procedures
- work instructions
- standard operating procedures (SOPs)

- safe work method statements (SWMS)
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Hazards Hazards must be identified and controlled. Identifying hazards requires consideration of:

- hazardous products and materials
- vapours or other atmospheric hazards
- interaction of polymers, additives and other materials
- sharp edges, protrusions or obstructions
- slippery surfaces, spills or leaks
- structural hazards
- equipment failures
- machinery, equipment and product mass
- other hazards that might arise.

Unit Mapping Information

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Links

Companion Volume implementation guides are found in VETNet -

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