



Australian Government

Department of Education, Employment and Workplace Relations

PMBPROD240C Cut materials

Revision Number: 1

PMBPROD240C Cut materials

Modification History

Not applicable.

Unit Descriptor

Unit descriptor

This competency covers preparation and operation of specialised equipment or procedures to cut materials to size, shape or to a pattern, and the resolving of routine problems to procedure.

Application of the Unit

Application of this unit

This competency applies to operators who are involved in the use of specialised equipment or processes to cut material. The key factors are the making of products to meet quality standards and workplace requirements. This competency is typically performed by operators working either independently or as part of a work team.

It includes:

- checking job sheets for work to be done and identifying the priority in which jobs/product will be made/completed
- setting up equipment
- preparing materials as required
- ensuring that safety procedures are applied to reduce the risks
- identifying and taking action on routine process problems
- completing logs and reports.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisites

This unit has **no** prerequisites.

Employability Skills Information

Employability Skills

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes of a unit of competency	Performance Criteria describe the required performance needed to demonstrate achievement of the Element. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT ELEMENT	PERFORMANCE CRITERIA Performance Criteria describe the required performance needed to demonstrate achievement of the Element. Assessment of performance is to be consistent with the Evidence Guide.
1. Check work requirements.	1.1 Identify work requirements from procedures. 1.2 Identify product, materials and equipment requirements for job(s). 1.3 Recognise hazards and adopt steps required to ensure safety. 1.4 Check with supervisor/appropriate person if requirements are not in accordance with usual practice.
2. Conduct pre-start checks as required.	2.1 Check safety gates and guards are in position and working. 2.2 Check raw materials are correct. 2.3 Undertake other pre-start checks in accordance with procedures.
3. Use tools/equipment.	3.1 Operate cutting tools/equipment to cut materials to procedures. 3.2 Monitor dimensions, quality and quantity of cuts. 3.3 Remedy faults and non-conformances by correcting operation or adjusting tools/equipment as required. 3.4 Collect material which is able to be recycled or reused, separate and dispose of waste and scrap.
4. Resolve routine problems.	4.1 Identify likely faults that occur during the operation/task. 4.2 Identify and take action on causes of routine faults in accordance with procedures. 4.3 Make sure appropriate records and log books of equipment operations are maintained to meet procedures. 4.4 Identify non-routine problems and report to designated person.

Required Skills and Knowledge

This describes the essential skills and knowledge and their level required for this unit.

Application of knowledge of the materials, equipment and process sufficient to recognise out of specification products, process problems and materials faults.

Knowledge of organisation procedures and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and work standards.

Competence includes the ability to:

- apply and/or explain different types of materials and their behaviour when cut, different cutting equipment and suitability for materials
- identify controls of cutting equipment
- list and describe routine faults in products, routine problems in process
- distinguish between causes of faults such as materials deficiencies, heat, changes to materials during the cutting process, equipment adjustments/set-up, equipment maintenance requirements
- original manufacturer instructions and guidelines for the safe use of the cutting tools/equipment
- relevant procedures relating to safe working practices prescribed for the equipment
- local OHS legislation and/or regulations
- site-specific instructions based on production requirements.

Language, literacy and numeracy requirements

This unit requires the ability to read and interpret typical product specifications, job sheets, procedures, material labels and safety information as provided to operators.

Writing is required to the level of completing workplace forms.

Basic numeracy is required, eg to determine that two 25 kg bags are needed to make up a requirement for 50 kg.

Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, required skills and knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

Overview of assessment

A holistic approach should be taken to the assessment.

Assessors must be satisfied that the person can consistently perform the unit as a whole, as defined by the Elements, Performance Criteria and skills and knowledge.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

It is essential that competence is demonstrated in the knowledge and skills defined in this unit. These may include the ability to:

- recognise the importance of material properties and qualities
- apply approved procedures
- take appropriate action to resolve faults or report faults to appropriate personnel
- explain and implement emergency shutdown procedures.

Consistent performance should be demonstrated. For example, look to see that:

- material cutting production standards are met consistently
- upstream and downstream communication is timely and effective
- procedures and work instructions are read and interpreted correctly
- problems are identified and appropriate action is taken (ie the problem is fixed or reported)
- all safety procedures are followed.

Assessment method and context

Assessment will occur using industrial materials, equipment and scenarios and will be undertaken in a work-like environment.

Competence in this unit may be assessed:

- on a processing plant, allowing for operation under all normal and a range of abnormal conditions
- in a situation allowing for the generation of evidence of the ability to respond to problems
 - by using a suitable simulation and/or a range of case studies/scenarios
 - through a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment. Assessors need to be aware of any cultural issues that may affect responses to questions.

Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the assessee and the work being performed.

Specific resources for assessment

This section should be read in conjunction with the Range Statement for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

Access must be provided to appropriate learning and/or assessment support when required.

Where applicable, physical resources should include equipment modified for people with disabilities.

Range Statement

RANGE STATEMENT

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Where reference is made to industry codes of practice, and/or Australian/international standards, the latest version must be used.

Context

This competency applies to operators working either independently or as part of a work team.

Procedures

All operations are performed in accordance with procedures.

Procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

Tools and equipment

This competency includes use of equipment and tools such as:

- guillotines, power saws, jig saws, band saws, thermal cutting devices
- controller, such as PLC if fitted
- hand tools as required
- relevant personal protective equipment.

Hazards

Typical hazards include:

- fibres and dusts, airborne and handled
- manual handling hazards
- power tools, leads and power supplies
- stationery and moving machinery, parts and components.

Problems

'Respond to routine problems means apply known solutions to a limited range of predictable problems'. Typical process and product problems may include:

- pattern, eg pattern incorrect, marking errors
- equipment, eg wear and breakage, temperature variations, loss of power or drives, controller sequence, timer issues
- process, eg sequencing problems.

Variables

Key variables to be monitored include:

- material characteristics
- material availability
- type of cutting equipment
- cutting edge condition.
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Unit Sector(s)

Not applicable.