



Australian Government

MEM05005 Carry out mechanical cutting

Release: 1

MEM05005 Carry out mechanical cutting

Modification History

Release 1. Supersedes and is equivalent to MEM05005B Carry out mechanical cutting

Application

This unit of competency defines the skills and knowledge required to set up and operate a range of mechanical cutting and holing equipment.

Typical applications of this unit include cutting for manufacture, production cutting and cutting materials in a maintenance environment.

Where the interpretation of technical drawings is required unit MEM09002 Interpret technical drawing should also be selected.

Where the selection and use of power tools for hand held operations is required unit MEM18002 Use power tools/hand held operations should also be selected.

Where operational maintenance of equipment is required unit MEM07001 Perform operational maintenance of machines/equipment should also be selected.

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

Band: A

Unit Weight: 2

Pre-requisite Unit

MEM11011	Undertake manual handling
MEM12023	Perform engineering measurements
MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information
MEM18001	Use hand tools

Competency Field

Fabrication

Elements and Performance Criteria

Elements describe the essential outcomes.

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

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|---|---|-----|--|
| 1 | Determine job requirements | 1.1 | Follow standard operating procedures (SOPs) |
| | | 1.2 | Comply with work health and safety (WHS) requirements at all times |
| | | 1.3 | Use appropriate personal protective equipment (PPE) in accordance with SOPs |
| | | 1.4 | Identify job requirements from specifications, sketches, job sheets or work instructions |
| | | 1.5 | Plan use of material to minimise waste |
| 2 | Select/set up machine tooling | 2.1 | Select appropriate method/machines to meet specifications |
| | | 2.2 | Load machines and adjust for operation according to SOPs |
| | | 2.3 | Select and install tooling to match job requirements |
| | | 2.4 | Set up and adjust machines according to SOPs |
| 3 | Operate mechanical cutting machine | 3.1 | Set appropriate stops and guards and adjust as required |
| | | 3.2 | Secure and position material as required |
| | | 3.3 | Operate machine to cut/hole material to meet specifications |
| | | 3.4 | Check material and adjust machine and/or tooling as required against specifications |
| | | 3.5 | Check material for conformance to specifications |

Foundation Skills

This section describes those required skills (reading, writing, oral communication and numeracy) that are essential to workplace performance in this unit of competency.

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.

Machines include one or (1) more of the following:

- guillotines
- croppers
- cold saws
- band saws
- automatic saws
- abrasive saws

Tooling includes one (1) or more of the following:

- guillotine blades
- cropper punches and dies
- cold saw blades
- band saw blades
- automatic saw blades

Materials include one (1) or more of the following:

- ferrous
- non-ferrous
- non-metallic products

Stops and guards include the following:

- all safety equipment/stops/guards

Unit Mapping Information

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Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>