



Australian Government

MEM05007 Perform manual heating and thermal cutting

Release: 1

MEM05007 Perform manual heating and thermal cutting

Modification History

Release 1. Supersedes and is equivalent to MEM05007C Perform manual heating and thermal cutting

Application

This unit of competency defines the skills and knowledge required to perform manual heating, thermal cutting and gouging including the assembly and disassembly and operation of the equipment on a range of materials.

Where the selection and use of tools is required unit MEM18001 Use hand tools and unit MEM18002 Use power tools/hand held operations, should also be selected as appropriate.

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

Band: A

Unit Weight: 2

Pre-requisite Unit

MEM09002	Interpret technical drawing
MEM11011	Undertake manual handling
MEM12023	Perform engineering measurements
MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information

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	1.1	Follow standard operating procedures (SOPs)
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Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.	
	requirements	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, drawings, job sheets or work instructions
2	Select and set up heating and thermal cutting equipment	2.1	Select cutting process and/or method appropriate for material
		2.2	Select and assemble appropriate accessories and equipment
		2.3	Ensure equipment is in safe working condition
		2.4	Set up equipment following SOPs
3	Perform heating and thermal cutting	3.1	Follow equipment start-up procedures and make adjustments as required
		3.2	Make appropriate cutting allowances
		3.3	Minimise wastage of materials when performing manual heating and thermal cutting
		3.4	Identify defects and take corrective action in accordance with SOPs
		3.5	Heat and cut material to specification
		3.6	Inspect shape/size/length of final product for compliance with 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.

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

- hand held
- self-propelled straight line cutters

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

- manual
- automatic

Fuel gases include one (1) or more of the following:

- acetylene
- liquefied petroleum gas (LPG)
- hydrogen

Material includes various thicknesses and types of one (1) or more of the following:

- ferrous
- non-ferrous
- non-metallic

Equipment includes the following:

- gas cylinders
- hoses
- blowpipes
- tips and nozzles
- regulators
- flashback arrestors

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM05007C Perform manual heating and thermal cutting

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>

