



Australian Government

MEM04012 Assemble plated patterns

Release: 2

MEM04012 Assemble plated patterns

Modification History

Release 2. Quantum of hours of workplace practice removed. Supersedes and is equivalent to MEM04012 Assemble plated patterns (Release 1).

Release 1. Supersedes and is equivalent to MEM04012B Assemble plated patterns.

Application

This unit of competency defines the skills and knowledge required to assemble all types of plated patterns using a range of materials. It covers the manufacture (when appropriate) and mounting of runner systems.

Where the manufacture of polymer-plated patterns is required unit MEM04011 Produce polymer patterns should also be selected.

Where the selection and use of cast aluminium plates is required unit MEM04014 Develop and manufacture production patterns should also be selected.

Where the selection and use of precision measurement is required unit MEM12003 Perform precision mechanical measurement should also be selected.

Where the selection and use of machining competencies is required applicable units should also be selected.

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

Band: A

Unit Weight: 8

Pre-requisite Unit

MEM04010	Develop and manufacture wood patterns
MEM04018	Perform general woodworking machine operations
MEM09002	Interpret technical drawing
MEM11011	Undertake manual handling
MEM12006	Mark off/out (general engineering)
MEM12023	Perform engineering measurements
MEM12024	Perform computations
MEM12026	Perform advanced trade calculations in a manufacturing,

	engineering or related environment
MEM13015	Work safely and effectively in manufacturing and engineering
MEM14006	Plan work activities
MEM16006	Organise and communicate information
MEM18001	Use hand tools
MEM18002	Use power tools/hand held operations

Competency Field

Casting and moulding

Elements and Performance Criteria

Elements describe the essential outcomes.

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

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, drawings, job sheets or work instructions
2	Inspect and layout patterns	2.1	Inspect pattern to ensure dimensions and surface finish conforms to specifications
		2.2	Lay out pattern and runner system to specifications from drawings, sketches or verbal instructions
		2.3	Align pattern in an appropriate manner
3	Mount pattern on plates	3.1	Attach cope and drag patterns/double sided match plate patterns to pattern plate/s according to specification

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

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| | | 3.2 | Inspect cope and drag patterns/double sided match plate patterns for security and alignment |
| 4 | Mount runner system | 4.1 | Adjust volume of runner system to conform to specifications |
| | | 4.2 | Attach runner components pattern plates to specification using appropriate fixing and joining techniques |
| 5 | Inspect plated pattern assembly | 5.1 | Inspect surface and mouldability of plated pattern assembly 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.

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

- timber
- timber composite
- metal

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

- measurement
- dowels

Unit Mapping Information

Release 2. Supersedes and is equivalent to MEM04012 Assemble plated patterns (Release 1).

Release 1. Supersedes and is equivalent to MEM04012B Assemble plated patterns.

Links

The MEM Metal and Engineering Training Package Companion Volume Implementation Guide is available from VETNet -

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