



**Australian Government**

# **Assessment Requirements for MEM04036 Maintain patterns**

**Release: 1**

# Assessment Requirements for MEM04036 Maintain patterns

## Modification History

Release 1. New unit.

## Performance Evidence

Evidence required to demonstrate competency in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- identifying and interpreting specifications, drawings and sample products or components to maintain pattern
- examining defective pattern for breakage, wear and defects requiring precision repair
- disassembling the defective pattern in accordance with tool making techniques and procedures and marking worn or damaged components for repair or replacement
- obtaining appropriate materials for manufacture of replacement pattern components and testing for hardness
- shaping and producing the replacement pattern components to specifications on at least two occasions using appropriate processes
- assembling and fitting all pattern components to specifications on at least two occasions using patternmaking techniques and procedures
- using precision instruments to check the first-off component or product for compliance to specifications on at least two occasions
- recording the conditions that lead to the failure of a pattern and recommending design modifications to rectify recurring faults or failure.

Note: Where a volume and/or frequency is not specified, demonstration must be provided at least once.

## Knowledge Evidence

Evidence required to demonstrate the required knowledge for this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include knowledge of:

- safe work practices and procedures and use of personal protective equipment (PPE)
- common pattern defects, common causes of pattern faults and conditions leading to pattern failure
- rectification techniques to restore patterns to specifications
- reasons for establishing a sequential plan for the repair or maintenance of defective pattern
- documenting plans for the repair or maintenance of defective pattern
- disassembling defective pattern
- identifying worn or damaged pattern and components for repair or replacement

- selecting and obtaining materials in terms of strength, durability, component finish, availability and reasons for selection
- fitting and assembling of pattern components and precautions to be taken
- documenting pattern faults
- recommending pattern design modifications
- specifications of pattern components
- precision instruments to be used to check pattern components for conformance to specifications and reasons for selection
- reasons for deciding to repair or replace worn or damaged components
- pattern materials, including physical properties of each component of the pattern to be replaced
- tools to be used to fashion the required replacement pattern components and reasons for selection
- specifications of the finished product
- causes of fault commonalities or trends and events associated with pattern faults and proposed solutions for recurrent faults that may occur in pattern and reasons for selection.
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## Assessment Conditions

- Assessors must:
  - have vocational competency in maintaining patterns at least to the level being assessed with relevant industry knowledge and experience
  - satisfy the assessor requirements in the Standards for Registered Training Organisations 2015 or its replacement and comply with the National Vocational Education and Training Regulator Act 2011, its replacement or equivalent legislation covering VET regulation in a non-referring state/territory as the case requires.
- Where possible, assessment must occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions that cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
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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>