



Australian Government

Assessment Requirements for MEM04042 Develop and manufacture vacuum forming moulds and associated equipment

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MEM04015 Develop and manufacture vacuum forming moulds and associated equipment (Release 2).

Performance Evidence

Evidence required to demonstrate competence 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 and other applicable reference documents to develop and manufacture vacuum forming moulds
- applying vacuum forming processes in determining design of moulds and selecting appropriate materials to meet specifications on at least two occasions
- undertaking calculations for pattern parameters, taking into account plastic sheet thickness and contraction rates
- developing and marking out pattern showing size and position of air evacuation and of the moulded form on at least two occasions
- selecting and using appropriate machines, machining process and hand and power tools to shape, produce, fashion and manufacture vacuum forming patterns to specifications on at least two occasions
- checking vacuum forming pattern meets specifications.

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)
- features, characteristics and applications of timber and epoxy resin products
- vacuum forming techniques
- tooling required for manufacture of vacuum forming patterns and moulds
- formulae and calculations required to manufacture patterns and moulds including contraction and taper
- techniques, tools and equipment to measure, mark out and produce vacuum forming patterns and moulds
- pattern checking techniques.
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Assessment Conditions

- Assessors must:
 - have vocational competency in the development and manufacture of vacuum forming moulds and associated equipment 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>