



Australian Government

Assessment Requirements for MEM04040 Develop and manufacture polystyrene patterns

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MEM04013 Develop and manufacture polystyrene patterns (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 for developing and manufacturing polystyrene patterns, including determining the grade and type of bead
- marking out pattern or pattern components to specifications, including determining the contraction allowance, on at least two occasions
- manufacturing pattern by joining and securing pattern components using appropriate adhesives on at least two occasions
- selecting and using tooling appropriate to the task
- checking and marking pattern for identification purposes to specifications
- handling and storing patterns in accordance with SOPs.

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)
- types and applications of polystyrene for patternmaking
- formulae and mathematical techniques required for manufacturing patterns or core boxes including contraction, taper, clearances and machining allowances
- marking out techniques for polystyrene patterns including undercuts and holes
- types and applications of adhesives
- tools and their uses in the manufacture of polystyrene patterns
- pattern checking techniques
- handling and storage techniques.
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Assessment Conditions

- Assessors must:
 - have vocational competency in the development and manufacture of polystyrene 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>