



Australian Government

Assessment Requirements for MEM04038

Produce polymer patterns

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MEM04011 Produce polymer 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 and customer requirements in producing polymer patterns
- preparing to produce polymer patterns by inspecting patterns or cores for appropriate surface finish, and setting up joint line or flat board to specifications
- undertaking numerical operations, including use of geometry and determination of contraction rates
- selecting and mixing the appropriate polymer materials and hardener to correct ratios and proportions in a safe and effective manner on at least two occasions
- applying polymer on at least two occasions to specifications, ensuring air is not trapped, excessive heat is not generated and delamination does not occur in final use
- machining and finishing faces of polymer pattern to specifications on at least two occasions
- applying method of location to patterns or core boxes
- carrying out maintenance and repair of patterns or core boxes.

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)
- machining for patternmaking
- parting agents
- methods of locating patterns or core boxes
- types of surface finishes
- types of polymers and their applications
- mixing ratios and calculations
- characteristics of polymer under exothermic reaction and associated control measures
- methods of stripping

- pattern checking techniques.
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Assessment Conditions

- Assessors must:
 - have vocational competency in producing polymer 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>