



Australian Government

**Assessment Requirements for MEM26001
Lay up composites using open moulding
techniques**

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MEM26001A Lay up composites using open moulding techniques

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria on at least two (2) occasions and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- identifying and interpreting specifications, formulas/recipes, batch sheets and customer requests for laying up composites using open moulding techniques
- calculating the quantity of materials required and applying gel coat and resin using rollers, brushes and/or chopper gun in accordance with procedures
- identifying and preparing reinforcement/reinforcement system
- assembling, cleaning and preparing simple and complex moulds and applying wax to release systems
- removing product from simple and complex moulds using appropriate equipment
- ensuring compliance to specifications
- identifying and rectifying any typical problems and monitoring curing cycles
- undertaking minor maintenance to chopper guns and/or pump systems (reciprocating airless pumps with air support in accordance with procedures
- minimising wastage
- completing all documentation and reports, including items requiring further action, in accordance with SOPs.

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)
- preparation schedules, terminology and information relevant to standard work instructions
- current state/territory work health and safety (WHS) legislation, standards and codes of practice relevant to laying up composites using open moulding techniques
- release agents surface tension
- gel coat, resin types and applications
- types of reinforcement and lay-up techniques
- common tools/equipment and their maintenance

- operation and maintenance requirements for solvent cleaners (filters)
- correct laminating techniques and finishing off (e.g. detail consolidation/rolling, check consistency and evenness of resin/glass, remove air entrapment and check with light)
- managing post-cure requirements (e.g. air cure and oven cure)
- production environment variables including the effect of humidity (e.g. epoxy backbone), temperature, ultraviolet (UV) light and contamination from other processes
- managing hazardous environments (e.g. styrene levels)
- function of catalysts, accelerators and promoters
- control of overspray
- storage of moulds
- waste disposal.

Assessment Conditions

- Assessors must:
 - have vocational competency in laying up composites using open moulding techniques 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. This must 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.

Links

Companion Volume implementation guides are found in VETNet -

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