



Australian Government

**Assessment Requirements for MEM09216
Interpret and produce curved 3D shapes
and patterns**

Release: 1

Assessment Requirements for MEM09216 Interpret and produce curved 3D shapes and patterns

Modification History

Release 1. Supersedes and is equivalent to MEM09216A Interpret and produce curved 3-D shapes and patterns.

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
- determining purpose and scope for drawing requirements relevant to the project utilising all available information
- performing measurements and computations including geometric and numerical calculations relevant to the project
- interpreting and producing curved 3D shapes and patterns for hull designs on at least two occasions
- confirming curved 3D shapes and patterns accurately reflect specifications
- complying with organisational policies and procedures including quality requirements
- submitting drawings to appropriate personnel or organisations.

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
- vessel design characteristics, including performance, stability and construction methods
- spatial concepts
- procedures used to produce line plan drawings and loftings
- drawing principles and conventions
- data requirements for producing line plan drawings
- numerical operations, geometry, calculations and formulae
- drawing techniques and procedures and use of equipment
- industry standards, terminology and symbols applying to lines plan drawings
- section development including curved and raking transom, conical development and camber development methods

- presentation requirements for completed work.

Assessment Conditions

- Assessors must:
 - have vocational competency in interpreting and producing curved 3D shapes and 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>