



Australian Government

MEM25007 Maintain marine vessel surfaces

Release: 1

MEM25007 Maintain marine vessel surfaces

Modification History

Release 1. Supersedes and is equivalent to MEM25007B Maintain marine vessel surfaces

Application

This unit of competency defines the skills and knowledge required to perform cosmetic maintenance/repair of marine vessel surfaces during routine maintenance-related inspection of hull and superstructure sectors, surfaces and fittings.

Where repair of marine surfaces and structures is required to be carried out unit MEM25008 Repair marine vessel surfaces and structures should also be selected.

Where slipping is required, or when working on a slipped craft unit MEM25014 Perform marine slipping operations should also be selected.

Where relevant units related to specific applications and materials are required appropriate units should also be selected.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Band: A

Unit Weight: 4

Pre-requisite Unit

MEM11011	Undertake manual handling
MEM13003	Work safely with industrial chemicals and materials
MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information
MEM18001	Use hand tools
MEM18002	Use power tools/hand held operations

Competency Field

Marine craft construction

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

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|---|--|-----|--|
| 1 | Determine job requirements | 1.1 | Follow standard operating procedures (SOPs) |
| | | 1.2 | Comply with work health and safety (WHS) requirements at all times |
| | | 1.3 | Use appropriate personal protective equipment (PPE) in accordance with SOPs |
| | | 1.4 | Identify job requirements from specifications, job sheets or work instructions |
| | | 1.5 | Identify sectors, surfaces and fittings requiring inspection |
| | | 1.6 | Establish condition of sectors/surfaces and fittings |
| | | 1.7 | Establish appropriate cosmetic maintenance/repair requirements and methods |
| | | 1.8 | Identify and take action to minimise risks associated with toxic materials |
| | | | |
| 2 | Clean and prepare vessel sectors and surfaces | 2.1 | Select and use correct cleaning tools, equipment and materials |
| | | 2.2 | Clean fittings and prepare for maintenance |
| | | 2.3 | Ensure surfaces and sectors are cleaned and free of contaminants |
| | | | |
| 3 | Perform cosmetic maintenance/repair and finish surfaces | 3.1 | Prepare surfaces, fill and fair ready for finishing |
| | | 3.2 | Confirm compatibility of re-coating material |
| | | 3.3 | Select and apply material coatings |
| | | 3.4 | Maintain/replace fittings, as appropriate |
| | | 3.5 | Clean tools and equipment and store according to SOPs |
| | | 3.6 | Re-coat surfaces, where applicable |

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 3.7 Sand surfaces and buff/polish to specification, where applicable

Foundation Skills

This section describes those required skills (reading, writing, oral communication and numeracy) that are essential to workplace performance in this unit of competency.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Surfaces include one (1) or more of the following:

- fibre reinforced plastics
- timber
- metal

Cosmetic maintenance/repair includes one (1) or more of the following:

- chips in fibre reinforced plastics
- minor corrosion in metal
- caulking in timber surfaces
- wear and corrosion of fittings

Cleaning tools, equipment and materials include one (1) or more of the following:

- hand scrapers and scouring pads
- hand held power tools
- abrasive materials and equipment and associated dust extraction accessories
- high-pressure blast cleaning equipment
- chemical cleaners, including acid wash, solvent and detergents

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM25007B Maintain marine vessel surfaces

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for MEM25007 Maintain marine vessel surfaces

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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 to establish appropriate cosmetic maintenance/repair requirements, including cosmetic environmental and other damage
- identifying surface coating of different sectors of the marine vessel surfaces and detecting faults, flaws and breakdown in surface integrity
- identifying and taking actions to minimise risks associated with toxic materials
- selecting and using appropriate cleaning tools, equipment and materials to clean/etch surfaces
- removing fittings and preparing parts/sections in need of repair and carrying out repairs using and applying fillers, caulking compounds, sealants, adhesives and gel coats, where required
- preparing surfaces in readiness for application of surface finishing and protective coatings and applying/restoring in accordance with procedures and reinstalling/replacing fittings.

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)
- structure, component, and surface type identification
- written and verbal instruction and specification
- range of cleaning/etching/cutting solutions and compounds
- protective and preservative coatings
- fault and blemish identification
- types of fillers, caulking, sealants, adhesives and their uses
- operation of hand and mechanical tools including high- pressure cleaning devices
- methods of cleaning, performing cosmetic repair and surface preparation, finishing and preservation
- environmental impact of run-off and waste
- waste disposal obligations and regulations.

Assessment Conditions

- Assessors must:
 - have vocational competency in maintaining marine vessel surfaces 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.

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