



Australian Government

MARB008 Carry out basic welding, brazing, cutting and machining operations on a coastal vessel

Release: 1

MARB008 Carry out basic welding, brazing, cutting and machining operations on a coastal vessel

Modification History

Release 1. New unit of competency.

Application

This unit involves the skills and knowledge required to carry out basic welding, brazing, cutting and machining tasks.

This unit applies to engine workers in the maritime industry working as a Marine Engine Driver Grade 1 Near Coastal on vessels up to 1500 kW.

This unit has links to legislative and certification requirements.

Pre-requisite Unit

Not applicable.

Competency Field

B - Equipment Checking and Maintenance

Unit Sector

Not applicable.

Elements and Performance Criteria

Elements describe the essential outcomes.

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

1 Carry out basic welding tasks

- 1.1 Requirements for welding tasks are correctly interpreted from work instructions
- 1.2 Parts are prepared for welding according to established practice
- 1.3 Parts are welded according to established practice and work requirements
- 1.4 Weld defects are identified and appropriate action is taken according to established practice and standard operating procedures

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| | 1.5 | Flame gouging methods are used to remove plate and weld material according to established practice and standard operating procedures |
| | 1.6 | Finished work is checked against work instructions for accuracy and quality |
| 2 Carry out basic brazing tasks | 2.1 | Requirements for brazing tasks are correctly interpreted from work instructions |
| | 2.2 | Parts are prepared for brazing according to established practice and work requirements |
| | 2.3 | Brazing equipment is prepared for brazing operations according to established procedures |
| | 2.4 | Parts are brazed using established procedures |
| | 2.5 | Finished work is checked against work instructions for accuracy and quality |
| 3 Carry out basic cutting tasks | 3.1 | Instructions are reviewed, and required size and shape of cut work is correctly identified and interpreted |
| | 3.2 | Work is correctly marked out in preparation for cutting according to established practice and standard operating procedures |
| | 3.3 | Thermal cutting plant and equipment is set up according to established procedures |
| | 3.4 | Steel plate and/or rolled sections are cut to shape and size according to established practice and standard operating procedures |
| | 3.5 | Finished work is checked against work instructions for accuracy and quality according to standard operating procedures |
| 4 Carry out basic machining tasks | 4.1 | Requirements for basic machining tasks are correctly interpreted from work instructions according to standard operating procedures |
| | 4.2 | Work is correctly marked out in preparation for basic machining according to established practice and standard operating procedures |
| | 4.3 | Machine is set up according to established procedures |

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| | 4.4 | Machining is carried out according to established procedures |
| | 4.5 | Finished work is checked against work instructions for accuracy and quality according to standard operating procedures |
| 5 Follow safety and hazard control procedures | 5.1 | Required safety precautions and regulations are followed when carrying out basic welding |
| | 5.2 | Operational hazards are identified and action is taken to eliminate, or where elimination is not possible to minimise, risk to personnel |

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

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

Range of Conditions

Specifies 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.

Range is restricted to essential operating conditions and any other variables essential to the work environment.

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| Operational hazards include one or more of the following: | <ul style="list-style-type: none">• moving and rotating machinery• moving heavy loads using unsafe procedures• non-compliance with safe working procedures• poor housekeeping procedures• power tools• sharp tools and implements• unsecured machinery, components or equipment• using equipment beyond safe working limits• using welding equipment near explosive/flammable liquids and gases |
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Unit Mapping Information

This is a new unit. This unit is equivalent to MARB4001A Carry out basic welding, brazing, cutting and machining operations on a coastal vessel.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=772efb7b-4cce-47fe-9bbd-ee3b1d1eb4c2>