



Australian Government

MARC2004A Operate deck machinery

Release 1

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Modification History

Release 1

This is the first release of this unit.

Unit Descriptor

This unit involves the skills and knowledge required to safely use deck machinery on a vessel.

Application of the Unit

This unit applies to engine workers in the maritime industry working as a Marine Engine Driver Grade 3 on vessels up to 500 kW or as a Marine Engine Driver Grade 2 on vessels up to 750 kW or as a Marine Engine Driver Grade 1 on vessels up to 1500 kW.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

- | | |
|---|---|
| 1 Prepare lifting equipment and deck machinery for use | <ul style="list-style-type: none">1.1 Appropriate personal protective equipment and machinery is selected, used and stored according to work health and safety (WHS)/occupational health and safety (OHS) requirements1.2 Routine pre-operational checks are carried out on lifting equipment and deck machinery according to manufacturer specifications, regulatory and organisational requirements1.3 Deviations from the norm are promptly identified and rectified1.4 Adjustments are made to achieve a safe and efficient operation1.5 Inability to start machinery is reported promptly and accurately to appropriate personnel |
| 2 Operate lifting equipment and deck machinery | <ul style="list-style-type: none">2.1 Machinery is operated in a safe and controlled manner2.2 Machinery is operated within defined operating limits when running, to achieve optimum safety and efficiency2.3 Deviations from normal operations are promptly identified2.4 Action is taken to rectify basic operational faults to maintain optimum safety and efficiency2.5 Appropriate action is taken in a malfunction or emergency |
| 3 Check and complete lifting equipment and deck machinery operations | <ul style="list-style-type: none">3.1 Equipment and machinery shut-down procedures are carried out according to manufacturer specifications and organisational procedures3.2 Equipment and machinery damage, malfunctions or irregular performance is recorded and reported according to organisational procedures |

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required Skills:

- Follow manufacturer recommendations, regulations and vessel operating procedures
- Implement safe work practices
- Use deck machinery

Required Knowledge:

- Basic hydraulic systems and their operation
- Legislation affecting lifting equipment
- Lifting equipment
- Safe working procedures
- Trawling and fishing gear
- Winches, capstans, windlasses
- WHS/OHS requirements and work practices

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, the required skills and knowledge, the range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the Elements, Performance Criteria, Required Skills, Required Knowledge and include:

- being aware of own ability and limits to rectify irregularities and faults
- ensuring currency of relevant WHS/OHS skills and knowledge.

Context of and specific resources for assessment

Performance is demonstrated consistently over time and in a suitable range of contexts.

Resources for assessment include access to:

- industry-approved marine operations site where operating deck machinery can be conducted
- tools, equipment and personal protective equipment currently used in industry
- relevant regulatory and equipment documentation that impacts on work activities
- range of relevant exercises, case studies and/or other simulated practical and knowledge assessments
- appropriate range of relevant operational situations in the workplace.

In both real and simulated environments, access is required to:

- relevant and appropriate materials and equipment
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals.

Method of assessment

Practical assessment must occur in an:

- appropriately simulated workplace environment and/or
- appropriate range of situations in the workplace.

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate to this unit:

- direct observation of the candidate operating deck machinery
- direct observation of the candidate applying relevant WHS/OHS requirements and work practices.

Guidance information for

Holistic assessment with other units relevant to the industry

assessment

sector, workplace and job role is recommended.

In all cases where practical assessment is used it should be combined with targeted questioning to assess Required Knowledge.

Assessment processes and techniques must be appropriate to the language and literacy requirements of the work being performed and the capacity of the candidate.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below.

- | | |
|---|---|
| Personal protective equipment may include: | <ul style="list-style-type: none">• Boots• Gloves• Hard hat• Hearing protection• Overalls• Protective eyewear |
| Pre-operational checks may include: | <ul style="list-style-type: none">• Inspecting safety guards, power take off stubs and shafts• Lifting equipment• Observing and monitoring noise levels for correct operation• Pre-start and safety checks including:<ul style="list-style-type: none">• oils and lubricants• lines• emergency stops |
| Lifting equipment and deck machinery may include: | <ul style="list-style-type: none">• Basic hydraulic systems• Capstans• Cranes• Trawling and fishing gear• Winches• Windlasses |
| Safe and controlled manner may include: | <ul style="list-style-type: none">• Maintaining workloads within specifications• Selecting and using appropriate machinery and equipment• Using operational techniques for specific location and weather conditions |
| Basic operational faults may include: | <ul style="list-style-type: none">• Failure of hydraulic lines• Machinery break downs• Structural failure |

Unit Sector(s)

Not applicable.

Competency Field

Equipment Operations