



**Australian Government**

# **MARC031 Shift mooring lines using mechanical means**

**Release: 1**

# MARC031 Shift mooring lines using mechanical means

## Modification History

Release 1. New unit of competency.

## Application

This unit involves the skills and knowledge required to shift mooring lines using mechanical means, including correctly using capstan and quick release systems.

This unit applies to people working in the maritime industry as a Linesperson.

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

## Pre-requisite Unit

Not applicable.

## Competency Field

C – Equipment operations

## Unit Sector

Not applicable.

## Elements and Performance Criteria

### ELEMENTS

Elements describe the essential outcomes.

#### 1 Identify mechanical mooring techniques and their application

### PERFORMANCE CRITERIA

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

- |     |  |
|-----|--|
| 1.1 | Appropriate mechanical mooring and unmooring techniques and equipment are identified                           |
| 1.2 | Features of mechanical mooring and unmooring equipment are established and their impact on safety is explained |
| 1.3 | Relevant documentation and records are identified and accessed as required                                     |
| 1.4 | Types of berth and terminals where mechanical mooring  |

- and unmooring are applied are explained and documented
- 2 Prepare equipment**
    - 2.1 Appropriate personal protective equipment (PPE) is selected and assembled according to work health and safety (WHS)/occupational health and safety (OHS) requirements
    - 2.2 Equipment is located, selected and made ready according to organisational procedures
    - 2.3 Routine pre-operational checks are carried out on tools and equipment according to manufacturer specifications and organisational requirements
    - 2.4 Adjustments are made to achieve safe and efficient operation
    - 2.5 Inability to start equipment is reported promptly and accurately to appropriate personnel
  - 3 Respond to hazardous situation**
    - 3.1 Hazards associated with mechanical mooring and unmooring are identified
    - 3.2 Risk is assessed and hazard control measures are applied to level of responsibility, or referred to appropriate person for further action according to organisational procedures
    - 3.3 Inability to start equipment is reported promptly and accurately to appropriate personnel
  - 4 Operate mechanical mooring and unmooring equipment**
    - 4.1 Appropriate safety procedures are followed and PPE is used to undertake mooring and unmooring operations according to organisational procedures
    - 4.2 Tools and equipment are operated in a safe and controlled manner within defined operating limits to achieve optimum safety and efficiency
    - 4.3 Malfunctions are promptly identified and appropriate action is taken in a malfunction or emergency
    - 4.4 Action is taken to rectify basic operational faults to maintain optimum safety and efficiency
    - 4.5 Irregularities or malfunctions are reported to appropriate personnel
  - 5 Complete mechanical mooring and shut down**
    - 5.1 Equipment is shut down according to manufacturer specifications and organisational procedures
    - 5.2 Defective, damaged or malfunctioning equipment is

**equipment**

recorded and reported according to organisational procedures

- 5.3 All required documentation is completed according to organisational procedures

## Foundation Skills

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

## Range of Conditions

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

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Safety procedures include:

- checking:
  - own personal fitness and medical wellbeing
  - whereabouts of edge of wharf
  - whereabouts of other members of mooring and unmooring team
- confirming availability of a personal flotation device on arrival at mooring and unmooring operation
- keeping clear of snapback zone and demarcated areas
- keeping work area hazard-free
- obtaining and using required PPE (such as safety footwear, safety helmet, suitable gloves, safety vest and reflective clothing, personal life jacket vest, safety glasses)
- removing rings from fingers to avoid them being caught on steel wire ropes

Berth and terminals may include one or more of the following:

- liquefied natural gas (LNG) carrier berths
- oil berths
- liquid petroleum gas (LPG) berths
- bulk liquids berths
- coal/iron ore berths
- RoRo terminals
- container terminals

Relevant documentation and records include one or more of the following:

- mooring and unmooring plans, procedures, checklists and instructions
- relevant maritime authority instructions

Mooring and unmooring operations include:

- relevant sections of maritime regulations concerning mooring and unmooring operations
- reports and records of mooring and unmooring operations or any safety incident
- rope and equipment manufacturer instructions and procedures
- safety instructions and procedure
- landing a gangway
- placing or removing brow onto gangway
- positioning lines launch
- positioning mooring lines
- preparing a berth
- receiving mooring lines under a vessel
- receiving heaving line from:
  - a launch
  - a vessel
- returning heaving line to a vessel
- unmooring and letting go a vessel
- working:
  - by day or night
  - in normal and emergency situations
  - under any permissible conditions of weather
  - at various shore-side terminals and wharves
  - buoys

## Unit Mapping Information

No equivalent unit.

## Links

Companion Volume implementation guides are found in VETNet -

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