



Australian Government

SFIFSH301 Operate vessel deck machinery and lifting appliance

Release: 1

SFIFSH301 Operate vessel deck machinery and lifting appliance

Modification History

Release	Comments
Release 1	This version released with SFI Seafood Industry Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to operate deck machinery and lifting appliances for lifting and hauling operations on board an aquaculture or fishing vessel. It includes the ability to carry out rope work, operate cranes, winches, capstans and windlasses, and assist in maintaining vessel stability and mooring operations.

The unit applies to individuals who operate vessel deck machinery and lifting appliances on a vessel where a licence or permit is not required.

All work must be carried out to comply with workplace procedures, according to state/territory health and safety, food safety, biosecurity and environmental regulations, legislation and standards that apply to the workplace.

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

Pre-requisite Unit

Nil

Unit Sector

Fishing Operations (FSH)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Use and maintain ropes, slings and chains for lifting or hauling operations	1.1 Select and fit the required personal protective equipment for lifting or hauling operations 1.2 Apply appropriate use of ropes, slings and chains for lifting or hauling operations

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Monitor load constantly to ensure load and structural stability 1.4 Check ropes, slings and chains for wear and maintain and stow according to workplace procedures 1.5 Carry out routine post-operational equipment checks according to workplace and health and safety requirements
2. Operate cranes, winches, capstans and/or windlasses	2.1 Select, check and prepare cranes, winches, capstans and/or windlasses for operation using safe work practices 2.2 Give, interpret and follow required signals according to Australian standards 2.3 Carry out securing of the vessel at anchor, to another vessel, to a sea cage or wharf according to safety regulations 2.4 Assess load mass and correlate with lifting capacity of equipment being used throughout proposed operation 2.5 Operate cranes, winches, capstans and/or windlasses to carry out lifting or hauling operations using safe work practices 2.6 Keep work area free of loose ropes, wires and debris throughout operations 2.7 Operate equipment controls smoothly and according to manufacturer instructions
3. Maintain the stability of the vessel whilst conducting lifting or hauling operations	3.1 Access and interpret stability data according to workplace procedures 3.2 Apply workplace stability criteria while conducting lifting and hauling operations 3.3 Monitor vessel stability against criteria appropriate to the type and nature of the operation 3.4 Take appropriate and prompt action where stability factors have or could exceed acceptable safety limits 3.5 Take special precautions where vessel operations affect the stability and watertight integrity of the vessel 3.6 Take timely and appropriate action to anticipated environmental changes that may affect the stability of the vessel 3.7 Take appropriate action in emergency situations to maintain the stability of the vessel within safety limits 3.8 Ensure instructions to others regarding vessel stability and related action are appropriate, timely, clear and concise

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
4. Shut down and stow deck machinery and lifting equipment	4.1 Check all deck machinery and lifting and hauling equipment components for signs of deterioration or damage according to workplace procedures 4.2 Segregate and report damaged or worn equipment to an authorised person for testing, repair or destruction 4.3 Stow and secure lifting and hauling equipment according to workplace procedures 4.4 Immobilise and secure deck machinery and equipment for travel according to workplace procedures and regulatory requirements 4.5 Update records accurately and promptly and process according to workplace procedures 4.6 Check and authorise all certified lifting equipment regularly according to regulatory health and safety requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Reads safety rules and regulations
Numeracy	- Estimates safe working loads of ropes, wires, chains and slings - Reads levels of tanks and void spaces - Reads temperature-monitoring devices
Navigate the world of work	- Interprets and follows regulatory requirements and seeks clarification or other assistance when required - Takes responsibility for planning activities and making decisions about when and how to complete tasks and coordinate with others
Interact with others	- Uses appropriate vocabulary, conventions and protocols, including technical language relevant to role - Cooperates and collaborates with others to conduct lifting operations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
SFIFSH301 Operate vessel deck machinery and lifting appliance	SFIFISH311A Operate vessel deck machinery and lifting appliance	Updated to meet Standards for Training Packages Minor amendments to performance criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=e31d8c6b-1608-4d77-9f71-9ee749456273>

Assessment Requirements for SFIFSH301 Operate vessel deck machinery and lifting appliance

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has operated deck machinery and lifting equipment aboard an aquaculture or fishing vessel for at least one lifting or hauling operation, including:

- using and maintaining the appropriate ropes, slings and chains for the operation
- selecting and fitting personal protective equipment
- checking, preparing and safely operating the crane, winch, capstan and/or windlass while maintaining the stability of the vessel
- communicating effectively with others when operating deck machinery and lifting equipment
- performing safe shutdown and storing of machinery and equipment
- completing accurate records of the operation.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- materials and methods of construction of ropes, slings and chains
- physical characteristics and common areas of use of ropes, slings and chains for lifting and hauling operations
- principles relating to vessel lifting and hauling operations, including:
 - relevant industrial agreements, codes of practice or other legislative requirements
 - different configurations of mooring lines for various parts of a vessel
 - hazards that could occur if the operation is not controlled properly
 - relevant health and safety procedures and regulations
 - status of safety equipment
- principles relating to:
 - the correct application of common knots, bends and hitches

- how a vessel is made fast to the wharf, sea cage or another vessel
- mooring systems, including the specific functions of the mooring leads
- how to maintain the stability of a vessel
- procedures relating to:
 - operating of cargo lifting and securing equipment
 - setting up and rigging of lifting equipment on board the vessel
 - operating powered equipment in all modes, including emergency operation
 - operating deck machinery and lifting equipment applications, capacities, configurations, safety hazards and control mechanisms
 - preparing deck machinery for use in ambient conditions
 - problems that arise when operating deck machinery or lifting equipment, and actions that should be taken to prevent or solve them
 - splicing rope and tying common knots, bends and hitches.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a fully operational aquaculture or fishing vessel or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - ropes, slings and/or chains
 - vessel deck machinery and lifting appliances
- specifications:
 - workplace procedures for lifting and hauling operations that include advice on health and safety requirements
 - manufacturer operating and maintenance instructions for deck machinery and lifting equipment
- relationships:
 - evidence of interactions with other crew members.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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