

Title	Demonstrate and apply knowledge of cargo lifting equipment to cargo operations in a port environment		
Level	3	Credits	8

Purpose	<p>This unit standard is for cargo handlers engaged in slinging cargo on wharves, in the hold of vessels, or inland ports.</p> <p>People credited with this unit standard are able to demonstrate knowledge of working instructions and SWL information used for cargo lifting operations, demonstrate knowledge of the care and handling of cargo lifting equipment, calculate SWL for cargo lifting operations, and complete an on-site risk assessment for slinging cargo loads in a port environment.</p>
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Classification	Stevedoring and Ports Industry > Cargo Operations
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Available grade	Achieved
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Prerequisite	Unit 30072, <i>Demonstrate and apply knowledge of slinging regular loads safely</i> , or demonstrate equivalent knowledge and skills.
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Guidance Information

- 1 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable service information, and company requirements and legislative requirements.
- 2 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to – the current version of the Health and Safety at Work Act 2015; *Approved Code of Practice: Load-lifting rigging* available at <https://worksafe.govt.nz/>, *Code of Practice for Health and Safety in Port Operations* available at <https://worksafe.govt.nz/>; and any subsequent amendments and replacements.
- 3 Reference
Crane Safety Manual for Crane Operators and Dogmen (Wellington: Crane Association of New Zealand (Inc), 2016) available at www.cranes.org.nz.
- 4 Definitions
Company requirements refer to instructions to staff on policy and procedures that are available in the workplace. These requirements may include – company policies and procedures, work instructions, product quality specifications and legislative requirements.

Defects refer to damage that is clearly detectable and is significant enough, in terms of company policies and procedures, to report. Such damage may not necessarily have occurred during the current operation or be caused by the candidate.

Hazards refer to situations and conditions presenting actual or potential risk including but not limited to – risk of harm to persons and/or environment, risk of damage to property and/or process, and exposure to financial loss.

SWL (Safe Working Load), also known as Working Load Limit (WLL), refers to the maximum working load that can be lifted as specified by the manufacturer.

Service information may include – technical information for a vehicle, machine, or product detailing operation; installation and servicing procedures; manufacturer instructions; technical terms and descriptions; and detailed illustrations.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of working instructions and SWL information used for cargo lifting operations.

Performance criteria

1.1 Types of working instructions are identified and explained in terms of their use.

Range may include but is not limited to – safe work method statement, SWL information, toolbox talks, pre-start briefs, sequence sheets, ship's plan, order of work; evidence of three is required.

1.2 The location of SWL information for lifting equipment and machinery is identified.

Outcome 2

Demonstrate knowledge of the care and handling of cargo lifting equipment.

Range lifting equipment may include but is not limited to – wire ropes, non-wire ropes, chains, web slings, round slings, cargo nets, hooks, shackles, spreaders, spreader bars, shortening clutches, cages, cranston, cam locks.

Performance criteria

2.1 Care and handling practices that help maintain the safe working condition of cargo lifting equipment are described.

2.2 Defects that render lifting equipment unsafe are described.

2.3 Method for removal and tag-out of damaged or defective lifting equipment is described.

Outcome 3

Calculate SWL for cargo lifting operations.

Performance criteria

3.1 The correct method to determine the weight of a lift is applied.

3.2 SWL is calculated for various slings.

Range wire rope, chain, flat web;
one leg, two legs, three legs, four legs;
120°, 90°, 60°, or less;
straight lift, basket hitch, choke hitch;
evidence of six sling calculations using different combinations is required.

Outcome 4

Complete an on-site risk assessment for slinging cargo loads in a port environment.

Performance criteria

4.1 Hazards that may be encountered whilst operating cargo lifting equipment on shipboard, wharfside and inside restricted work areas are identified and described in terms of their potential harm.

Range includes but is not limited to – access to and from vessels and holds, overhead loads, unauthorised vehicles and personnel, operating machinery, adverse weather, visibility, simultaneous operations, wharfside surfaces, worn or damaged equipment.

4.2 Hazard controls are described in terms of elimination, isolation and minimisation of contributing hazards.

Range may include but is not limited to – failure of lifting points, sharp edges, regular and irregular load differences, load support, use of tag lines, loose objects on the load, hazardous goods, load security, pinch points, weather;
evidence of five is required.

4.3 The correct process of reporting hazards is described and carried out.

4.4 Hazard controls are implemented.

4.5 Relevant documentation is completed.

Planned review date	31 December 2022
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	31 May 2018	N/A

Consent and Moderation Requirements (CMR) reference

0014

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact MITO New Zealand Incorporated info@mito.org.nz if you wish to suggest changes to the content of this unit standard.