

Title	Operate an excavator to stow cargo on board a vessel in a port environment		
Level	3	Credits	15

Purpose	People credited with this unit standard are able to prepare to operate, operate and shut down an excavator on board a vessel to stow cargo in a port environment.
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Classification	Stevedoring and Ports Industry > Cargo Operations
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Available grade	Achieved
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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, 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; *Code of Practice for Health and Safety in Port Operations* available at <https://worksafe.govt.nz/>; and any subsequent amendments and replacements.
- 3 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.
Excavator refers to a hydraulic excavator fitted with a bucket or a grapple and/or push plate.
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

Prepare to operate an excavator to stow cargo on board a vessel in a port environment.

Performance criteria

- 1.1 Pre-operational check is carried out.

- 1.2 The operator's cab is entered using correct access method.
- Range machine stationary, facing the machine, using steps and grab rails, three-point contact.

- 1.3 Start-up procedure is carried out.

Outcome 2

Operate an excavator on board a vessel to stow cargo in a port environment.

Performance criteria

- 2.1 Excavator is positioned correctly.
- Range maintaining safe distance from hatch lid edges and stanchions, minimising steel-on-steel contact, facing heave as it is loaded, keeping in view of the crane operator, anticipating heave movement.
- 2.2 Excavator is operated in a hatch.
- Range may include but is not limited to – adjusting to limitations on traction, following stow plan, guiding heave into position before release, avoiding contact with vessel's structure, optimising space, filling under-runs, filling eyes and wings, using drop-stow pattern, levelling of stowed logs, pausing the operation when the excavator is unattended and climbing from one level to another, rectifying unplanned heave movements.
- 2.3 Excavator is operated on deck.
- Range may include but is not limited to – filling side decks first, ensuring a bed of logs is laid down on the hatch lid, keeping a heave between excavator and stanchions, bridging between hatches, stow is crowned, stowing short logs against stanchions, rectifying unplanned heave movements.
- 2.4 Safe travel of an excavator on board a vessel is carried out.
- Range track orientation, underfoot conditions, wear and damage to undercarriage, machine stability, damage.
- 2.5 Boom and dipper arm function operations are carried out.
- 2.6 Safe control of the bucket or grapple and/or push plate function is carried out.
- Range may include but is not limited to – the bucket or the grapple and/or push plate height is kept constant, logs accumulated in a single movement, rotation controlled, avoiding unplanned contact with objects.

Outcome 3

Shut down an excavator.

Performance criteria

- 3.1 The excavator is parked in preparation for shutdown.
Range as level as practicable, cleared area, in parked position, hydraulic system isolated, clear of other operations.
- 3.2 Engine is idled down and switched off.
- 3.3 The operator's cab is exited using correct dismount method.
- 3.4 The excavator is secured.

Planned review date	31 December 2023
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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
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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.