Title	Erect, dismantle, and reconfigure a self-erecting tower crane		
Level	5	Credits	25

Purpose	People credited with this unit standard are able to: plan for, erect, dismantle, and reconfigure a self-erecting tower crane; and carry out safety and functional tests, and calibrate and set limits and load limits on the self-erecting tower crane, set up security enclosure, and complete documentation.
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Classification	Cranes > Crane Operation
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Available grade
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Entry information	
Critical health and safety prerequisites	Unit 3787, Demonstrate knowledge of regulatory requirements relating to cranes; and Unit 3789, Sling regular loads and communicate during crane operations; or demonstrate equivalent knowledge and skills.

## **Explanatory notes**

- 1 Definition
  - The definition of a *crane* is as given in the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999.
- 2 Assessment
  - Assessment must be carried out in a crane workplace or equivalent.
- All tasks are to be carried out in accordance with the equipment manufacturers' requirements and company standards and procedures based on industry requirements in:
  - a company quality management systems;
  - b health and safety requirements and guidelines consistent with the Health and Safety in Employment Act 1992 (HSE Act);
  - c equipment manufacturers' operating instructions;
  - d government and local government legislation, regulations, and bylaws;
  - e *Crane Safety Manual*, published by the Crane Association of New Zealand (Inc), PO Box 25 156, Panama Street, Wellington 6146;
  - f Approved Code of Practice for Cranes, published by the Department of Labour, available at http://www.dol.govt.nz.
- 4 HSE Act Codes of Practice are available from the Department of Labour website, http://www.osh.dol.govt.nz.

# **Outcomes and evidence requirements**

#### Outcome 1

Plan for, erect, dismantle, and reconfigure a self-erecting tower crane.

## **Evidence requirements**

- 1.1 Survey of site, environment, and surrounding structures, and review of building site plan is conducted in accordance with company procedures.
  - Range overhead lines, obstructions, effective crane radius, hazard control, power supply, traffic control.
- 1.2 Ground conditions for positioning the self-erecting crane are checked to ensure they meet crane manufacturer's requirements, company procedures, and registered civil engineers ground certificate or soil ground compaction results.
- 1.3 Personnel involved with erection and dismantling of the self-erecting tower crane are liaised with in accordance with company procedures throughout the erection and dismantling process.
  - Range includes but is not limited to site controller, electrician, transport operator, mobile crane supervisor, traffic control.
- 1.4 Selected tooling and equipment are appropriate to the make and type of selferecting tower crane and in accordance with the proposed height of the crane and to ensure ease of movement.
- 1.5 Procedures for erection, dismantling, and reconfiguration of the self-erecting tower crane are planned and carried out in accordance with crane manufacturer's requirements, *Approved Code of Practice for Cranes*, and company procedures.
- 1.6 Permits required are identified in accordance with company procedures.

#### Outcome 2

Carry out safety and functional tests, and calibrate and set limits and load limits on the self-erecting tower crane, set up security enclosure, and complete documentation.

# **Evidence requirements**

- 2.1 The self-erecting tower crane is inspected using the crane manufacturer's checklist to ensure compliance with crane manufacturer's requirements, the *Approved Code of Practice for Cranes*, and general arrangement drawings.
- 2.2 Safety and functional tests and checks are carried out to ensure that devices are operative, limits calibrated and set, and that the self-erecting tower crane operates in accordance with crane manufacturer's requirements.

- 2.3 Load limit tests are carried out in accordance with crane manufacturer's requirements, and the *Approved Code of Practice for Cranes*.
- 2.4 Security enclosure is set up in accordance with company procedures.
- 2.5 Documentation is completed in accordance with company procedures.

Range

includes but is not limited to – log books, maintenance requests, erection certificate, ground certificate, hook certificate, rope certificates, certificate of electrical conformity.

Planned review date	31 December 2016
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## Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	24 September 2003	30 June 2013
Review	2	20 May 2008	30 June 2013
Review	3	15 March 2012	N/A

eration Requirements (CMR) reference 0025
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This CMR can be accessed at http://www.nzga.govt.nz/framework/search/index.do.

#### Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMR). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

#### Comments on this unit standard

Please contact The Skills Organisation at reviewcomments@skills.org.nz if you wish to suggest changes to the content of this unit standard.