Title	Plan and direct complex lifting operations		
Level	5	Credits	25

Purpose	People credited with this unit standard are able to: prepare and read elevation and plan drawings for proposed lifts; plan complex crane lifts; and direct complex crane lifts, and complete documentation.

Classification	Cranes > Crane Operation
Available grade	Achieved

Entry information		
Critical health and safety prerequisites	Unit 3787, Demonstrate knowledge of regulatory requirements relating to cranes; Unit 3788, Demonstrate knowledge of crane types, and safe practices required in the crane industry; and Unit 3789, Sling regular loads and communicate during crane operations; or demonstrate equivalent knowledge and skills.	

Explanatory notes

1 Definitions

The definition of a *crane* is as given in the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999. Complex lifts are also referred to as Category 2 lifts, and are defined in the *Crane Safety Manual* (page 86).

- 2 Assessment Assessment must be carried out in a crane workplace or equivalent.
- 3 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.
- 4 HSE Act Codes of Practice are available from the Occupational Safety and Health Service of the Department of Labour website, http://www.osh.dol.govt.nz.

Outcomes and evidence requirements

Outcome 1

Prepare and read elevation and plan drawings for proposed lifts.

Evidence requirements

1.1 Existing drawings are checked to ensure consistency with actual physical measurements.

Range site, crane lifting equipment.

1.2 Drawing is to scale in relation to the described site.

Range elevation, plan.

1.3 Drawing is to scale in relation to the proposed lift.

Range weight, radius.

1.4 Type of crane and lifting equipment required are established in relation to the proposed lift.

Outcome 2

Plan complex crane lifts.

Evidence requirements

- 2.1 Approvals for the lifts are obtained both internally and externally in accordance with company procedures, regulatory requirements, and approved relevant HSE Act Codes of Practice.
- 2.2 Customer requirements are assessed and resources arranged in accordance with company procedures.
 - Range mass of load to be moved, share of load to be lifted by crane(s), type(s) of crane(s) to be used, safety margins, sequence of operations, hazard control measures, lifting equipment, equipment certification; personnel – dogmen, riggers, supervisor, communications.

Outcome 3

Direct complex crane lifts, and complete documentation.

Evidence requirements

3.1 Crane(s) are positioned in accordance with the authorised plan of work.

3.2 Personnel involved with the lift are briefed and directed to their respective positions.

Range operators, riggers, dogmen.

- 3.3 Operators are directed to trial the lift without the load, in accordance with the supervisor's instructions, whilst operating the cranes in accordance with the crane operating manual and company procedures.
- 3.4 Lift is carried out to the authorised plan, in accordance with recognised standards and other statutory regulations.
- 3.5 Documentation is completed in accordance with company procedures.

Range may include but is not limited to – log books, records.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment	
Registration	1	9 April 1995	30 June 2013	
Review	2	22 May 1997	30 June 2013	
Review	3	27 March 2000	30 June 2013	
Review	4	20 June 2006	30 June 2013	
Review	5	15 March 2012	N/A	

nsent and Moderation Requirements (CMR) reference 0025	
--	--

This CMR can be accessed at http://www.nzqa.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.