

40832**Configure and operate a mobile crane to lift and place regular and irregular loads**

Kaupae Level	4
Whiwhinga Credit	25
Whāinga Purpose	<p>This skill standard is for people intending to complete a qualification and/or credentials in crane operation.</p> <p>People with this skill standard have the skills to configure and operate a mobile crane to lift and place regular and irregular loads.</p> <p>This skill standard may contribute to New Zealand qualifications designed for crane operation.</p>
Whakaakoranga me mātua oti Pre-requisites	Skill Standard 40842 <i>Plan lifts for regular and irregular loads</i> , or equivalent skills and knowledge.

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Configure and position a mobile crane.	a. The task is analysed to identify regulatory requirements and any permits according to the task, and site.
	b. Lift plan is created for the given task.
	c. Workplace is analysed to identify hazards and risks related to the planned lift, and control measures are implemented.
	d. Crane is configured and positioned according to the lift plan.
	e. Ropes, reeving and parts of line, hook block, hook, and rigging equipment for the load to be lifted are configured.
	f. Crane is inspected and the crane controller is informed of any issues that may impact operation of the crane in line with manufacturer's instructions or company procedures.

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
2. Lift and place regular and irregular loads with a mobile crane.	a. Tasks, hazards, roles, and responsibilities are communicated to workers assisting with the lifts and other people who may be affected, according to the lift plan.
	b. A check is completed to make sure workers assisting with the lifts and other people who may be affected are in their positions ready to start.
	c. Loads are checked for correct attachment, lifted and placed according to the lift plan and customer requirements.
3. Prepare the mobile crane for road travel.	a. Mobile crane is prepared for road travel and equipment used for the lift is stored.
	b. Boom is secured in travel position.
4. Complete daily and weekly operator maintenance of the mobile crane.	a. Crane is inspected, daily and weekly maintenance undertaken, and the crane controller is informed of any issues that impact operation of the crane.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

Assessment specifications:

Company procedures may include toolbox talks, pre-starts, five-by-fives, hazard board, job safety and environmental analysis (JSEAs), safe work method statements.

Regulatory requirements and permits refer to Police, Waka Kōtahi, local body requirements, Corridor Access Request (CAR), electricity supply, telecommunications, WorkSafe New Zealand, Civil Aviation Authority, Rail Corridor Requirements.

Hazards and risks may include vehicles, equipment, ground condition, underground services, overhead powerlines, overhead service lines, trees buildings, structures, unauthorised people, exclusion zones, wind and weather, simultaneous activities.

Configuration of the crane includes blocks, outriggers, safe load indicator, boom length, anti-two-block, establishing weight of load (before lift); and may include counterweight, operating limits, fly jib.

Operational and safety checks may include a settlement test.

People who may be affected by the lift may include riggers, slingers, dogmen, supervisor.

Travel includes on road and off road.

Preparation for road travel includes understanding or demonstration of certificate of fitness (CoF)/warrant of fitness (WoF), registration applicable permits (national and regional road controlling authorities), swept path requirements, license and bridge engineering self-supervision (BESS), crane configuration, driving on road.

For the assessment:

- Cranes that can be used include truck mounted cranes, all terrain cranes, rough terrain cranes.
- A minimum of 40 lifts (slinging and directing placement of the load) must be observed and documented by an authorised verifier, with at least six variations of lifting operations that may include site, crane, loads, and communication methods; and
- At least two regular and two irregular loads, including one where centre of gravity is offset, and one blind lift must be observed by the assessor.

Definitions:

Industry good practice meets requirements of the Approved Code of Practice for Cranes, Approved Code of Practice for Load-lifting Rigging, and the Crane Safety Manual.

Irregular loads include one or more of the following characteristics: unequal weight distribution, eccentric loading, irregular shape and proportions, with or without set lifting points.

Lift plan refers to the planning of a lift that may be in a variety of formats.

Regular loads have the characteristics of uniform weight distribution, concentric loading or regular proportions, known lifting points, repetitively lifted.

Ngā momo whiwhinga | Grades available

Achieved.

Ihirangi waitohu | Indicative content

- Hazards associated with operation of a mobile crane.
- Roading and traveling of a mobile crane (assembling and checking required equipment, authorisation to use equipment, pre-start checks and service, fault reporting, Certificate / Warrant of fitness, licence, driving on road and BESS requirements).
- Risk assessment.
- Set up of a mobile crane onsite (site arrival and induction processes, permit to work, access and exit, crane platform assessment, risk assessment, establishing exclusion zones).
- Operation of a mobile crane (rating charts, range diagrams).
- Lock-out and tag-out requirements for mobile cranes.

Rauemi | Resources

- Approved Code of Practice for Cranes, available from www.worksafe.govt.nz.
- Government or local government legislation, regulations and bylaws.
- Equipment manufacturers' specifications.
- Company quality management systems or policies.
- Crane Programme Guidance, available from qualifications@waihangaararau.nz.
- Crane Safety Manual: For Crane Operators & Dogmen (Crane Association of New Zealand), available from www.cranes.org.nz.

Pārongo Whakaū Kouna | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Waihanga Ara Rau Construction and Infrastructure Workforce Development Council
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Service Sector > Cranes > Crane Operation
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0120

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	27 November 2025	N/A
Kōrero whakakapinga Replacement information	This skill standard replaced unit standard 3795.		
Rā arotake Planned review date	31 December 2030		

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council at qualifications@waihangaararau.nz to suggest changes to the content of this skill standard.