

**40837****Configure and operate a non-slewing articulated crane to lift and place regular and irregular loads**

<b>Kaupae   Level</b>	4
<b>Whiwhinga   Credit</b>	15
<b>Whāinga   Purpose</b>	<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 non-slewing articulated 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>
<b>Whakaakoranga me mātua oti   Pre-requisites</b>	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**

<b>Hua o te ako   Learning outcomes</b>	<b>Paearu aromatawai   Assessment criteria</b>
1. Configure and mobilise a non-slewing articulated crane to move regular and irregular loads.	a. Crane is inspected, and pre-start maintenance work is undertaken in line with manufacturer's requirements and the crane controller is informed of any issues that impact operation of the crane.
	b. The task is analysed to identify regulatory requirements and any permits according to the lift plan, task, and site.
	c. Workplace is analysed to identify hazards and risks related to the planned lift, and control measures are implemented.
	d. Crane is configured and mobilised according to the lift plan.
	e. Ropes, reeving and parts of line, hook block, lifting hook, and lifting point for the loads to be lifted are configured.

Hua o te ako   Learning outcomes	Paearu aromatawai   Assessment criteria
2. Lift regular and irregular loads, travel with a load on the hook, and place loads with a non-slewing articulated 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. Crane operator interprets the rating charts for articulation, reductions of capacity and the effects of articulation on stability.
	d. Loads are checked for correct attachment, lifted, moved and placed according to the Lift Plan.
	e. Crane is travelled with a load on the hook according to the Lift Plan.
3. Prepare the non-slewing articulated crane for road travel.	a. Crane is prepared for road travel and other equipment used for the lifts is stored.
	b. Boom is secured in travel position.
4. Complete daily and weekly operator inspection of the non-slewing articulated crane.	a. Crane is inspected 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:

Regulatory requirements and permits may include Police, Waka Kōtahi, local body requirements, Corridor Access Request (CAR), electricity supply, telecommunications, WorkSafe New Zealand, Civil Aviation Authority, Radio 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 safe load indicator and boom length, establishing weight of load (before lift); and may include counterweight, operating limits, fly jib, anti-two-block.

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

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.

Travel includes awareness and management of the effect of steering and de-rating due to articulation.

Documentation includes logbooks, records, job sheets, crane equipment inventories, maintenance requests.

For the assessment:

- A non-slewing articulated crane must be used. Telehandlers are not to be used.
- A minimum of 40 lifts (slinging and directed 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.
- At least two irregular loads, including one where centre of gravity is offset, 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.

A *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, and have been repetitively lifted.

### **Ngā momo whiwhinga** | Grades available

Achieved.

### **Ihirangi waitohu** | Indicative content

- Hazards associated with operation of a non-slewing articulated crane (roading, pivot steering, impacts of side slope, include, articulation).
- Roading and traveling of a non-slewing articulated crane (assembling and checking required equipment, authorisation to use equipment, pre-start checks and service, fault reporting).
- Set up of a non-slewing articulated crane onsite (site arrival and induction processes, permit to work, access and exit, ground slope, risk assessment, establishing exclusion zones).
- Operation of a non-slewing articulated crane (rating charts, range diagrams).
- Lock-out and tag-out requirements for non-slewing articulated cranes.
- Hazards, risk identification and control measures.
- Crane and equipment configuration.
- Communicate the tasks, hazards, roles and responsibilities in line with Lift Plan.
- Crane travel requirements including onsite, road travel.
- Documentation requirements associated with lift including defect reporting, job sheets and maintenance requests.

### **Rauemi** | Resources

- Crane Programme Guidance, available from [qualifications@waihangaararau.nz](mailto:qualifications@waihangaararau.nz).
- Approved Code of Practice for Cranes, available from [www.worksafe.govt.nz](http://www.worksafe.govt.nz).
- Crane Safety Manual: For Crane Operators & Dogmen (Crane Association of New Zealand), available from [www.cranes.org.nz](http://www.cranes.org.nz).

**Pārongo Whakaū Kouna | Quality assurance information**

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

<b>Hātepe   Process</b>	<b>Putanga   Version</b>	<b>Rā whakaputa   Review Date</b>	<b>Rā whakamutunga mō te aromatawai   Last date for assessment</b>
<b>Rēhitatanga   Registration</b>	1	27 November 2025	N/A
<b>Kōrero whakakapinga   Replacement information</b>	This skill standard replaced unit standard 24511.		
<b>Rā arotake   Planned review date</b>	31 December 2030		

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