

40840 Configure and operate a track crawler crane with lattice boom 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 track crawler crane with lattice boom 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 track crawler crane.	a. Workplace is analysed to identify hazards and risks related to the planned lift, and control measures are implemented.
	b. Crane is configured to manufacturer's specifications.
	c. A lift plan is created for the lift operation.
	d. Ropes, reeving, and parts of line, hook block, hook, and rigging equipment for the load are configured.
	e. Prestart safety checks for operation of plant and equipment are completed.
	f. Crane is placed in the optimal position to lift and place loads according to the lift plan.

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
2. Lift and place regular and irregular loads with a track crawler crane.	a. Tasks, hazards, roles, and responsibilities are communicated to workers assisting with the lift and other people who may be affected, according to the lift plan.
	b. All participants in the lifting operation are confirmed as ready and in position before starting the lift.
	c. Regular and irregular loads are confirmed as correctly attached and lifted and placed according to the lift plan and customer's requirements.
	d. Crane is travelled with loads on the hook according to the lift plan.
3. Place a track crawler crane with lattice boom in out-of-service condition.	a. Crane is put into out-of-service condition and equipment used for the lift is stored.
	b. Any defects in the crane and equipment are identified and action is taken as required.
4. Complete daily and weekly operator inspection checks of a track crawler crane with a lattice boom.	a. 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.

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

Assessment specifications:

Hazards and risks related to the planned lift may include vehicles, equipment, ground condition, underground services, overhead power lines, overhead service lines, trees, buildings, structures, unauthorised people, exclusion zones, wind and weather, simultaneous items.

Configuration of the crane includes blocks, safe load indicator, boom length, boom angle, parts of line, anti-two-block, establishing weight of load before the lift, counterweight, radius, computerised information, operating limits, height; and may include outriggers, fly jib.

Participants in the lifting operation may include riggers, slingers, dogmen, supervisor.

Documentation may include logs, records, job sheets, crane equipment inventories, maintenance requests, plant transfer sheet.

Other people who may be affected by the lift include riggers, slingers, dogmen, supervisor and public.

For the assessment:

- A track crawler crane with lattice boom and capacity of no less than 30 tonne is to be used.
- At least two loads must be travelled if manufacturers specifications allow. Loads may be regular, irregular, or a combination.
- Experience must be demonstrated via authorised verifier documented and observed lifts; and a minimum of 40 lifts with at least six variations of lifting operations that may include site, crane, loads, and communication methods.
- At least two regular and two irregular loads, including one where the 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.

Lift plan refers to 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 track crawler crane operation (transport, re-configuration onsite, attachments – including a fly jib).
- Transporting a track crawler crane from site to site (Police, Waka Kōtahi, local body requirements).
- Assembly and disassembly of the crane onsite (site arrival and induction processes, permit to work, access and exit, crane platform assessment, risk assessment, establishing exclusion zones, counterweight, A-frame, boom, tracks).
- Operation of a track crawler crane (rating charts and range diagrams, permits to work).
- Requirements for lock-out and tag-out processes.
- Fully hydraulically operated vs hydraulically powered track driven gear on cranes.
- Manual vs air clutch operated track driven gear on cranes.
- Principles of and process for crane configuration.

Rauemi | Resources

- Approved Code of Practice for Cranes, available from www.worksafe.govt.nz.
- Company quality management systems and 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.
- Equipment manufacturers' operating instructions.
- Government and local government legislation, regulations, and bylaws.

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 27676.		
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.