

40839**Configure and operate a mini crawler crane to lift and place regular and irregular loads**

Kaupae Level	4
Whiwhinga Credit	20
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 mini crawler 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. Prepare to lift and place regular and irregular loads with a mini crawler crane.	a. Workplace is analysed to identify hazards and risks related to the planned lift, and control measures are implemented.
	b. 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.
	c. Load, weight and radius are assessed to determine if it is within the lifting capacity of the crane.
	d. Crane is located on a firm surface, levelled, and configured according to manufacturer's requirements and the Crane Safety Manual.
	e. Lift plan for the lifting tasks is completed according to manufacturer's requirements.

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
2. Sling, lift and place regular and irregular loads with a mini crawler crane.	a. Lifting and ancillary equipment are selected according to the Crane Safety Manual.
	b. Lifting and ancillary equipment are assessed for defects, the equipment log is completed, and action is taken as required for any defects.
	c. Load is slung according to industry good practice and checked to make sure it is free from attachments and restraints.
	d. Regular and irregular loads are lifted and placed evenly according to crane manufacturer's and operator's manual, and industry good practice.
3. Prepare the mini crawler crane for road travel and stow away equipment after use.	a. Crane is positioned, stowed, and secured according to crane operator's manual.
	b. Any defects in the crane and equipment are identified and lifting equipment is stowed.
	c. Crane is prepared for road travel mode according to manufacturer's requirements and worksite rules.
4. Travel a mini crawler crane.	a. Crane is configured and set before travel according to manufacturer's requirements.
	b. Travel route is assessed for hazards and obstructions, and controls are put in place.
	c. Crane is travelled according to manufacturer's requirements and worksite rules.

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, communications, travel route, unsecured loads, types of loads.

Configuration of the crane includes placement in optimum position for the lift, outriggers extended, turn over prevention device activated, work area cordoned off.

Lifting equipment includes chain slings, wire rope slings, synthetic slings, shackles, hooks, purpose-built lifting equipment.

Positioning, stowing and securing of the crane includes boom retracted and stowed, hook block set in transport mode position, outriggers retracted with safety lock pins in place; and may include electric power cables disconnected and stowed away.

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

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

For the assessment:

- The mini crawler crane must be within the 0.5 to 6 tonnes capacity range and be set up to lift on outriggers.
- At least two regular lifts and two irregular lifts with varied configurations 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.

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

- Transporting a mini-crawler crane from site to site (Police, Waka Kōtahi, local body requirements).
- Hazards associated with operating a mini-crawler crane operation (vehicles, equipment, ground conditions, services on site, communications, load security and type, travel route).
- Manufacturer operating requirements and manual including use of outriggers, site cordons and turn over prevention devices).
- Operation of a mini-crawler crane (rating charts and range diagrams, permits to work).
- Requirements for lock-out and tag-out processes.
- Functions of critical components of a mini crawler crane and lifting equipment (brakes, ropes, sheaves, load sensors, anti-two-block, reset switch, alarm devices, hook block, boom, outriggers, hydraulic arms, remote control panel, electric power cables, control levers, slings, spreaders, hooks, shackles, purpose built lifting equipment. Lifting equipment includes chain slings, wire rope slings, synthetic slings, shackles, hooks, purpose-built lifting equipment).
- Lifting equipment stowage and crane preparations for transportation.
- Documentation completion and defect reporting.

Rauemi | Resources

- Approved Code of Practice for Cranes, available from www.worksafe.govt.nz.
- 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.
- Equipment manufacturers' specifications.
- Government or 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 26505.		
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.