40836 Operate a self-erecting tower crane to lift and place regular loads safely

| Kaupae Level | 3 |
|---|---|
| Whiwhinga Credit | 15 |
| Whāinga Purpose | This skill standard is for people intending to complete a qualification and/or credentials in crane operation. |
| | People with this skill standard have the skills to complete pre-start checks and to move regular loads with a self-erecting tower crane. |
| | This skill standard may contribute to New Zealand qualifications designed for crane operation. |
| Whakaakoranga me mātua oti Pre-requisites | Skill standard 40829 Carry out slinging and communicate effectively in a lifting operations context and 40830 Sling varied regular loads, and direct a crane during lifting operations, 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 | | |
|--|--|--|--|
| Complete pre lift activities for a self- erecting tower crane. | Pre-start checks are completed in accordance with manufacturer's specifications and/or company requirements. | | |
| | b. Pre-start documentation is completed, and remedial action is taken for any defects. | | |
| | c. Potential hazards and risks are identified, including environmental conditions, and appropriate controls are implemented. | | |
| | d. An appropriate lift plan is referred to. | | |
| Lift and place regular loads with a self- erecting tower crane. | Crane is configured and put into in-service condition according to manufacturer's specifications and local conditions. | | |
| | b. Lifting requirements are completed safely. | | |
| | c. Crane equipment used for the lift is returned to storage. | | |

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

Pre-start checks of the crane are in line with manufacturer's specifications or company requirements.

Pre-start documentation may include logbook, inspection template.

Lift plan must include weight calculations for regular loads, centre of gravity, identified hazards / risks and controls, appropriate lifting equipment and configuration, person directing the lift and communication methods to be used, as appropriate.

Lifting equipment may include wire slings, chains, magnets, synthetic slings, lifting beams, spreader bars.

Onsite conditions include location of power supply, condition of remote-control battery, obstructions in slew path.

Assessment must involve six verified lifts, and two assessor observed lifts.

Definitions:

Company requirements refer to instructions to staff on policy and procedures, which are documented in memo or manual format and available in the workplace. These requirements may include site specific requirements, company quality management requirements, manufacturer's requirements, Approved Codes of Practice and guidelines, and legislative requirements.

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 self-erecting tower crane operation.
- Purpose of a boom clash agreement.
- Procedures for putting self-erecting tower cranes in-service and out-of-service, the reasons for carrying out these procedures, and consequences of failing to do so.
- Function and relevance of the Certificate of Inspection.
- Prestart and maintenance checks.
- Lifting equipment terminology for functions of critical components and equipment.
- Self-erecting tower crane position height, boom position, boom angle, radius, weather conditions, location of obstructions, visibility of proposed load path.
- Care and use of lifting equipment.
- Out-of-service condition (i.e. weathervane free slew).

Rauemi | Resources

- Approved Code of Practice for Cranes, available from www.worksafe.govt.nz.
- 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 Kounga | 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 20208. | | |
| 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.