40497 Carry out intermediate rigging operations for complex loads

Kaupae | Level	4
Whiwhinga | Credit	20
Whāinga | Purpose	This standard recognises the skills required to prepare and carry out intermediate rigging operations for complex load movements. This standard contributes to the New Zealand Certificate in Rigging (Level 4) [Ref: 2356].

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

Hua o te ako | Learning outcomes	**Paearu aromatawai |** Assessment criteria
1. Prepare for intermediate rigging operations for complex loads.	a. Set out lift plan for intermediate rigging operation.
	b. Check and confirm that calculations set out in lift plan meets specified load, load weight and movement requirements of the complex load.
	c. Isolate work area in accordance with job specifications.
	d. Prepare and confirm site safety procedures and hazard controls in accordance with site specific procedures and job specification.
	e. Set out specialist structures or lifting, assemblies in accordance with lift plan specifications.
	f. Select and conduct inspection of lifting, moving, and handling equipment for the complex load.
	g. Confirm load lifting equipment is capable of safely moving the complex load.
	h. Securely attach lifting, moving, and handling equipment to the complex load using approved methods to manage control and balance.
	i. Undertake acceptable visual inspections of anchorages and lifting point components.
	j. Check work area and confirm that lift operation could proceed.

Hua o te ako | Learning outcomes	**Paearu aromatawai |** Assessment criteria
2. Undertake safe and effective load movement control and balance during intermediate rigging operations for complex loads.	a. Confirm lift plan, sequencing of lift, and communication methods with people involved in the intermediate rigging operation and people in area of operation.
	b. Visually inspect and confirm that attached lifting equipment and lifting fixtures on the load are secure, protected and can move the complex load safely.
	c. Direct intermediate rigging operation in accordance with lift plan and established communication procedures.
	d. Maintain effective complex load control and balance through to its final position.
3. Disestablish lifting assemblies for transit.	a. Disestablish lifting assembly in accordance with instructions and specifications.
	b. Inspect for damaged and/or faulty assembly components in accordance with manufacturer requirements and workplace procedures.
	c. Prepare transit loads in a way that minimises risk to people and potential damage to plant and equipment.
	d. Sequence load for loading and unloading and restrain appropriately.
	e. Leave the worksite in a safe condition.

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

Assessment specifications:

The candidate carries out movement of complex loads, including the siting and assembly of lifting systems, confirming that the load is secure before moving, controlling operations of equipment or systems to move complex loads, and releases safely and effectively the load to its intended destination.

The candidate will be capable of consistently demonstrating the technical skills and knowledge required to safely undertake complex lifts using specialist structures and lifting assemblies, including multiple lifting devices for an intermediate rigging operation. A rigging operation that requires from the outset detailed design and detailed planning, precise execution, and involves high-risk is outside the scope of practice of an intermediate rigger. This is considered an *advanced rigging operation* requiring advanced rigging skills.

A rigger undertaking an intermediate operation will be capable of working independently, applying appropriate rigging practices involving rigorous risk assessment, the safe installation of, and the operation of rigging systems across various environments.

A rigger will be capable of leading a team for an intermediate rigging operation that involves a complex load.

For mechanical lifting, moving and handling of loads the use of gantries and mechanical devices is acceptable.

For lifts involving cranes assessment must be carried out using either a crane with a 10 tonne minimum capacity; or a tower crane or self-erecting tower crane with a 4 tonne minimum capacity.

To achieve this standard the candidate must be capable of consistently performing the requirements:

- on a jobsite where the rigging operation will take place.
- with plant and equipment that meet industry standards.
- to current and relevant legislation, standards and codes (including operational safety practices).
- to requirements set out in accordance with equipment and manufacture guidelines, and engineering specifications.

Definitions:

A *complex load* will have one or more characteristics of unequal weight distribution, irregular shape, offset or high centre of gravity, and unknown lifting points.
An *intermediate rigging operation* is defined by the methods and techniques needing to be applied to the movement, including lateral movement and load transfers from one device to another, and the positioning of the complex load.

Ngā momo whiwhinga | Grades available

Achieved.

Ihirangi waitohu | Indicative content

Prepare intermediate rigging operation

- Scope of work for intermediate rigging operations, including plant and equipment.
- Plant and equipment to meet specified load, load weight and movement requirements for effective load control and balance.
- Site coordination requirements, including communication methods for all involved parties.
- Load stability and safety.
- Safety considerations and setup.
- Load movement.
- Rigging operation documentation (log books, job hazard analysis, site permitting. site records).

Prepare job site

- Knowledge of documentation, drawings, lift plan, and job sequencing.
- Ground and site conditions, including permits, access and egress for people and equipment.
- Site isolation and safety procedures – safety signage, barricades, personal protective equipment.
- Hazard and risk assessment and safety controls.
- Select, and inspect the lifting, moving and handling equipment – reject and tag.

Move and position load

- Establish temporary lifting assemblies.
- Equipment inspection for correct specification/configuration and check for serviceability.
- Assemble lifting system and confirming handling equipment is correctly applied and capable of safely moving the load.
- Performing test lifts – weight of load evenly distributed and secure.
- Team member communications for moving lift and promptly addressing issues or concerns during the lift.
- Landing the load safely.

Disestablish temporary lifting assemblies for transit

- Disestablish temporary lifting assemblies to instructions and specifications.
- Post use inspections for wear and faults.
- Safe loading of load shifting equipment and tools – safety of persons and equipment, sequencing load for loading and unloading back to yard, securing of loads to prevent load movement.
- Coordination of transit requirements, including documentation and adhering to procedures for transporting from job site.

Rauemi | Resources

Programme guidance information for the New Zealand Certificate in Rigging is available from qualifications@waihangaararau.nz.

Approved codes of practice available at www.worksafe.govt.nz:

- Approved Code of Practice for Load-lifting Rigging.
- Approved Code of Practice – Cranes.

Pārongo Whakaū Kounga | Quality assurance information

Ngā rōpū whakatau-paerewa | Standard Setting Body	Waihanga Ara Rau – Construction & Infrastructure Workforce Development Council
Whakaritenga Rārangi Paetae Aromatawai | DASS classification	Service Sector > Lifting Equipment > Intermediate Rigging
PreKo te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga | CMR	0003

Hātepe | Process	**Putanga |** Version	**Rā whakaputa |** Review Date	**Rā whakamutunga mō te aromatawai |** Last date for assessment
Rēhitatanga | Registration	1	27 March 2025	N/A
Kōrero whakakapinga | Replacement information	This skill standard replaced unit standards 4213 and 4215.		
Rā arotake | Planned review date	31 December 2029		

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.