

<b>Title</b>	<b>Inspect forest cable yarder and associated components</b>		
<b>Level</b>	<b>5</b>	<b>Credits</b>	<b>20</b>

<b>Purpose</b>	<p>People credited with this unit standard are able to: demonstrate knowledge of forestry health and safety requirements and cable yarder operations; prepare for cable hauler/yarder inspection; inspect cable hauler/yarder tower and associated components; and report the results of the cable hauler/yarder inspection.</p> <p>This unit standard is designed for Chartered Professional Engineers (CPEng) and experienced mechanical trades people who are required to carry out visual inspections and report on the condition of cable hauler tower structures and associated components.</p>
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<b>Classification</b>	Forestry > Forest Harvesting Operations
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<b>Available grade</b>	Achieved
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## Guidance Information

### 1 Definitions

*Accepted industry practice* refers to approved codes of practice and standardised procedures accepted by the wider forestry industry as examples of best practice.

*Cable yarder* refers to machines used in cable harvesting operations including fixed towers, leaning towers and swing yarders.

*PPE* refers to personal protective equipment and may include – protective clothing, gloves, safety glasses, headwear, footwear, hearing protection, and safety devices.

*Worksite procedures* refer to documented procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site safety procedures, equipment operating procedures, quality assurance procedures, housekeeping standards, procedures to comply with legislative and local body requirements.

- 2 Recommended skills and knowledge for entry into this unit standard is the New Zealand Certificate in Engineering Fabrication (Trade) (Level 4) with strands in Heavy Fabrication, Light Fabrication, and Steel Construction [Ref: 2719] or an equivalent qualification; and have completed further training in structural inspection, or be a Chartered Professional Engineer (CPEng), or demonstrate equivalent knowledge and skills.

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## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of forestry health and safety requirements.

#### Performance criteria

1.1 Operational hazards present in forest harvesting operations are identified and a control method for each hazard is explained in accordance with accepted industry practice.

Range operational hazards may include but are not limited to – machine movement, noise, confined spaces.

1.2 The procedures to gain entry to a forest harvesting operation are described in accordance with accepted industry practice.

### Outcome 2

Demonstrate knowledge of cable yarder operations.

#### Performance criteria

2.1 Differences between cable haulers and swing yarders are explained in terms of drums, tower design, and the ability to slew.

2.2 Components of cable hauler towers and swing yarders are identified and described in accordance with accepted industry practice.

Range components may include but are not limited to – tower, guy winches, tower mounting frames, guy blocks, skyline, strawline, tagline, stabiliser and tower raising rams, tower support frame, locking dogs, pendent ropes, gantry frame, slew ring, car body.

### Outcome 3

Prepare for cable yarder inspection.

#### Performance criteria

3.1 The cable yarder is checked for readiness prior to inspection in accordance with accepted industry practice.

3.2 Equipment required for inspection is assembled and checked in accordance with accepted industry practice.

Range equipment may include but is not limited to – PPE, measuring tape, flash light, binoculars, spray paint, camera, extension ladder, cleaning equipment.

3.3 Documents to support inspection and reporting are prepared in accordance with accepted industry practice.

Range inspection forms, yarder logbook, maintenance reports, previous tower inspection reports.

#### **Outcome 4**

Inspect cable yarder tower and associated components.

#### **Performance criteria**

4.1 The cable yarder tower structure and associated components are inspected in accordance with accepted industry practice.

Range structural soundness, defects, corrosion, damage, wear, deformation, weld integrity.

4.2 The cable yarder chassis and track frame are inspected in accordance with accepted industry practice.

Range structural soundness, defects, corrosion, damage, wear, deformation, weld integrity.

4.3 The cable yarder hydraulic systems are inspected in accordance with accepted industry practice.

Range structural soundness, defects, corrosion, damage, wear, deformation, weld integrity, hoses, clamps, leaks, pressures.

4.4 Guyline winches, guyline ropes, shackles, blocks, strops, and swivels are inspected in accordance with accepted industry practice.

Range structural soundness, defects, corrosion, damage, wear, deformation, weld integrity.

#### **Outcome 5**

Report the results of the cable yarder inspection.

#### **Performance criteria**

5.1 The condition of the inspected tower structure and associated components is documented in accordance with accepted industry practice and worksite procedures.

5.2 Remedial action required is identified, documented, and notified in accordance with accepted industry practice.

5.3 Report copies are distributed and filed in accordance with accepted industry practice and worksite procedures.

<b>Planned review date</b>	31 December 2028
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#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 December 2002	31 December 2014
Review	2	18 April 2013	31 December 2017
Review	3	10 December 2015	N/A
Rollover and Revision	4	28 May 2020	N/A
Rollover	5	26 April 2024	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0173
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

#### Comments on this unit standard

Please contact Muka Tangata - People, Food and Fibre Workforce Development Council [qualifications@mukatangata.nz](mailto:qualifications@mukatangata.nz) if you wish to suggest changes to the content of this unit standard.