

Title	Prepare wire ropes for forest harvesting operations		
Level	3	Credits	10

Purpose	<p>This unit standard is intended for people employed in forest harvesting roles in either a ground-based or cable harvesting operation.</p> <p>People credited with this unit standard are able to: demonstrate knowledge of wire ropes and accessories used in forest harvesting operations; demonstrate knowledge of wire rope handling processes during preparation for use in forest harvesting operations; and prepare wire ropes for use in forest harvesting operations.</p>
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Classification	Forestry > Forestry - Breaking Out
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Available grade	Achieved
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Guidance Information

- 1 This unit standard must be assessed against on-job.
- 2 Legislation relevant to this unit standard includes the Health and Safety at Work (HSW) Act 2015; the Resource Management (National Environmental Standards for Plantation Forestry) Amendment Regulations 2018; and any subsequent amendments.
- 3 References
Approved Code of Practice (ACOP) for Safety and Health in Forestry Operations, December 2012, available from <https://worksafe.govt.nz/>.
 New Zealand Forest Owners Association, *Forest Practice Guides* (2019), and any subsequent amendments, available from <https://www.nzfoa.org.nz>.
- 4 Definitions
Accepted industry practice – approved codes of practice and standardised procedures accepted by the wider forestry industry as examples of best practice.
Forest harvesting refers to the felling and extraction of stems, landing operations, log making, and loading.
- 5 All competencies must be demonstrated in accordance with accepted industry practice.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of wire ropes and accessories used in forest harvesting operations.

Performance criteria

- 1.1 The components of wire rope are named and the common constructions used in forest harvesting are described for 6 x 19, 6 x 26, and 6 x 31 ropes.
- 1.2 Terms associated with wire rope use are explained.
- Range Right-Hand Ordinary Lay (RHOL), Independent Wire Rope Core (IWRC), lay (of a rope), tensile grade, shock loading, shackle, ferrule, sprag, marlin spike, strand, wire core, kink, Safe Working Load (SWL), molly grommet, spooling, lubrication, swaging, pig-tailing.
- 1.3 Use of chains as accessories in forest harvesting operations is explained.
- 1.4 Requirements for shackles used in forest harvesting are described.

Outcome 2

Demonstrate knowledge of wire rope handling processes during preparation for use in forest harvesting operations.

Performance criteria

- 2.1 Three means of cutting wire rope are identified.
- 2.2 Two methods of attaching a ferrule to a length of wire rope are described.
- 2.3 The risks specific to preparing wire ropes are identified, and methods to control them are explained.
- Range evidence of four risks and a control method for each is required.
- 2.4 Common causes of damage to wire rope are explained.
- Range physical damage, accelerated wear.
- 2.5 Damage that would render wire rope unusable is explained.

Outcome 3

Prepare wire ropes for use in forest harvesting operations.

Performance criteria

3.1 The risks specific to wire rope handling and splicing are assessed and controlled.

3.2 Protective clothing and equipment are worn.

Range includes but is not limited to – gloves, high visibility clothing, eye protection, steel cap boots.

3.3 An eye is formed in the end of a wire rope.

Range logger's eye or married eye;
evidence required for married eye is two tucks on one side, three tucks on the other;
evidence required for logger's eye is all tucks on one side.

3.4 Wire ropes are cut in accordance with manufacturer's requirements.

3.5 Strand ends are controlled when unwinding and tucking wire rope.

3.6 The procedure to unspool a wire rope and avoid damage, kinking, and pig-tailing is explained.

Planned review date	31 December 2024
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	28 January 1995	31 December 2012
Review	2	8 November 1996	31 December 2012
Revision	3	19 June 1998	31 December 2012
Review	4	5 December 2000	31 December 2012
Review	5	22 May 2008	31 December 2012
Revision	6	16 July 2010	31 December 2012
Review	7	8 December 2011	31 December 2016
Review	8	19 March 2015	N/A
Review	9	23 January 2020	N/A

Consent and Moderation Requirements (CMR) reference	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 Competenz qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.