Title	Troubleshoot sawmill operations		
Level	5	Credits	20

Purpose	People credited with this unit standard are able to: analyse a sawmill operation and take corrective actions to optimise the operation; troubleshoot a sawmill operation quality problem; and troubleshoot a sawmill operation productivity problem.
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Classification	Solid Wood Manufacturing > Sawmilling	
Available grade	Achieved	

Guidance Information

- 1 Legislation Health and Safety at Work Act 2015. Resource Management Act 1991.
- 2 Definitions

Accepted industry practice – approved codes of practice and standardised procedures accepted by the wider sawmilling industry as examples of best practice. *Productivity* – is the relationship between or ratio of the total outputs and total inputs needed to produce a product. It is a measure of efficiency.

Quality – is the measure of excellence, or how flawless a product is and includes all features and characteristics of the product that allows satisfying stated or implied needs.

Sawmill operations refers to log specifications and log handling systems, primary breakdown systems, secondary breakdown systems, timber sorting, resawing, handling and stacking operations.

Workplace procedures refer to documented policies and procedures set by the organisation carrying out the work, and to documented or other directions provided to staff, and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site specific procedures, site safety procedures, equipment operating procedures, quality assurance procedures, product quality specifications, references, approved codes of practice, housekeeping standards, environmental considerations, on-site briefings, supervisor's instructions, and procedures to comply with legislative and local body requirements relevant to the industry sector.

3 Assessment information

All activities and evidence must meet workplace procedures and accepted industry practice.

Outcomes and performance criteria

Outcome 1

Analyse a sawmill operation and take corrective actions to optimise the operation.

Performance criteria

- 1.1 Sawmill processes are analysed, parts of the process that are not controlled at standard conditions are identified, and reasons for the deviations are described.
- 1.2 Logs and log specifications are analysed, potential problems for the sawmill process are identified, and remedial actions are taken.
- 1.3 Equipment condition is analysed, potential problems for the sawmilling operation are identified, and remedial actions are taken.
- 1.4 In-process product variations are analysed, potential problems for the sawmilling operation are identified, and remedial actions are taken.
- 1.5 Remedial actions taken are recorded and reported.

Outcome 2

Troubleshoot a sawmill operation quality problem.

Performance criteria

- 2.1 Equipment failure at process stages are identified and their relationship to final product quality problems is investigated.
- 2.2 The potential for product quality improvement is identified from the investigation.
- 2.3 Potential solutions that would enable the quality improvement are identified and justified using problem solving techniques.
- 2.4 Recommendations to implement the best solution to the identified quality problem are made.

Outcome 3

Troubleshoot a sawmill operation productivity problem.

Performance criteria

- 3.1 Bottlenecks in the sawmill operation related to productivity are identified and investigated.
- 3.2 The potential for productivity improvement is identified from the investigation.
- 3.3 Potential solutions that would enable the productivity improvement are identified and justified using problem solving techniques.

3.4 Recommendations to implement the best solution to the identified productivity problem are made.

Planned review date	31 December 2024	

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	18 December 2006	N/A
Review	2	23 April 2020	N/A

Consent and Moderation Requirements (CMR) reference	0013	
This CMR can be accessed at http://www.nzga.govt.nz/framework/search/index.do.		

Comments on this unit standard

Please contact Competenz <u>qualifications@competenz.org.nz</u> if you wish to suggest changes to the content of this unit standard.