Title	Demonstrate knowledge of developing and monitoring a saw centre size control programme			
Level	4	Credits	5	

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. *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

Demonstrate knowledge of concepts that underpin a saw centre size control programme.

## Performance criteria

- 1.1 The purpose of a size control programme is described and linked to sawmill quality systems in terms of quality assurance, customer requirements, and mill efficiency.
- 1.2 Statistical methods used to research and develop a size control programme are described.
  - Range methods may include but are not limited to distribution identification, sample size determination, calculation of sample statistics (mean, median, standard deviation), calculation of upper and lower control limits for the mean (95% confidence interval), and charting size control data.
- 1.3 Types of size control programmes are described in terms of their advantages and disadvantages.
  - Range size control programmes include manual, automated; a minimum of two advantages and two disadvantages for each type is required.
- 1.4 Board variation, within board variation, nominal size, and green target size are described in terms of their differences.
- 1.5 Causes of sawing variation are described in terms of feed rate, wood movement, knots, gullet load, saw strain, maintenance, and saw doctoring.

## Outcome 2

Demonstrate knowledge of developing and monitoring a size control programme.

## Performance criteria

- 2.1 The development of a size control programme is explained in terms of requirements to improve size accuracy.
  - Range requirements include time, frequency, number of measurements per board, specified saw centre, determination of upper and lower limits.
- 2.2 Hazards associated with monitoring a size control programme are identified and actions to be taken manage the hazards are described.
  - Range hazards may include but are not limited to moving plant, saws, moving timber, dust, noise; evidence of three are required.

2.3 The purpose of statistical methods used to collate information on performance levels is described.

Range methods include but is not limited to – distribution identification, sample size determination, calculation of sample statistics (mean, median, standard deviation), calculation of upper and lower control limits, graphs.

2.4 Sizing faults that occur within size control programmes are identified and their probable causes are explained in terms of machine or parameter issues.

Range evidence of three sizing faults are required.

- 2.5 Remedial action required for the sizing faults identified is described.
- 2.6 Reporting requirements for a size control programme are described.

Range reporting requirements may include but are not limited to – communication of information, statistical information, presentation of information.

Replacement information	This unit standard replaced unit standard 8007.
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	15 April 2011	N/A
Review	2	23 April 2020	N/A

Consent and Moderation Requirements (CMR) reference	0013		
This CMR can be accessed at http://www.nzqa.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.