

Title	Demonstrate knowledge of monitoring and control of product quality in a wood manufacturing workplace		
Level	3	Credits	8

Purpose	People credited with this unit standard are able to: demonstrate knowledge of information systems used in a wood manufacturing operation; describe techniques used to monitor and control process variability on a specified wood manufacturing work place; and demonstrate techniques and processes used to identify and troubleshoot wood manufacturing production problems.
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Classification	Wood Manufacturing - Generic Skills > Wood Manufacturing Foundation Skills
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Available grade	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 wood manufacturing industry as examples of best practice.

KPIs (key performance indicators) are financial and non-financial measures used to help an organisation define and evaluate how successful it is, typically in terms of making progress towards its long-term organisational goals.

Wood manufacturing operation refers to any operation or organisation involved in the conversion of any wood materials to saleable products.

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 wood manufacturing sector.

2 Assessment information

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

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of information systems used in a wood manufacturing operation.

Performance criteria

- 1.1 The importance of maintaining good information systems in a wood manufacturing operation is explained.
- Range include but is not limited to – information collection, storage, analysis, reporting.
- 1.2 Information collected in a specified wood manufacturing operation is identified, and the purpose for collecting the information is explained.
- Range two of – quality, production or process.
- 1.3 Techniques used to communicate product specifications are described and workplace examples are given.
- Range techniques may include but are not limited to – job cards, worksite instructions, product sheets, product specifications, customer specifications, industry specifications, national standards, international standards; evidence of at least two is required.
- 1.4 Production KPIs and related information system are explained, and an example given of how these are achieved by the candidate or candidate's team.
- Range four of – reduce waste, increase productivity, decrease production costs, decrease quality costs, minimise delays.

Outcome 2

Describe techniques used to monitor and control process variability on a specified wood manufacturing workplace.

Performance criteria

- 2.1 The term 'process variability' is defined in terms of a specified wood manufacturing operation.
- 2.2 Equipment used to measure product variation is identified.
- Range equipment may include but is not limited to – vernier calipers, rulers, gauges, moisture meters, scales, tally rods, scanners, density meters, sensors, measuring cylinders, time piece; evidence of at least three is required.
- 2.3 The purpose for calibrating workplace measuring devices is explained.

2.4 The concept of ‘measurement error’ is described.

Outcome 3

Demonstrate techniques and processes used to identify and troubleshoot wood manufacturing production problems.

Performance criteria

3.1 Techniques for the analysis of variability are identified and an example of each is calculated.

Range techniques may include but are not limited to – mean, range, upper control limit, lower control limit, acceptable variation.

3.2 Techniques for displaying process variability data are applied and interpreted.

Range techniques may include but are not limited to – data table, bar chart, run chart, control chart.

3.3 Actions to reduce process variability in a wood manufacturing operation are described.

Range actions may include but are limited to include – monitoring raw or input materials, operation and control of processing equipment, observations of process by operator, analysis of production run data.

3.4 Process steps used to investigate and troubleshoot wood manufacturing production problems are identified.

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	18 December 2006	31 December 2012
Revision	2	18 September 2009	31 December 2012
Review	3	15 April 2011	N/A
Review	4	28 May 2020	N/A

Consent and Moderation Requirements (CMR) reference	0013
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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.