

Title	Demonstrate knowledge of saw grinder application and operation		
Level	3	Credits	5

Purpose	People credited with this unit standard are able to demonstrate knowledge of: the design features of saw grinder machines and their applications; alignment and timing of saw grinder machines; the maintenance of saw grinders; and health and safety requirements when operating saw grinders.
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Classification	Solid Wood Manufacturing > Saw Doctoring
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Available grade	Achieved.
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Guidance Information

- 1 Legislation
Health and Safety at Work Act 2015.
- 2 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.
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.
- 3 Assessment information
All activities and evidence must be in accordance with workplace procedures and accepted industry practice.
- 4 Recommended unit standards for entry: Unit 15758, *Sharpen bandsaws*; and Unit 15759, *Sharpen circular saws*.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of the design features of saw grinder machines and their applications.

Performance criteria

- 1.1 Grinding machine design features are explained.
Range plunge and profile grinders.
- 1.2 Types of grinding methods are explained, and their advantages and disadvantages are described.
Range wet and dry grinding, plunge and profile grinders.
- 1.3 Saws are identified and matched with selected saw grinding machine types.

Outcome 2

Demonstrate knowledge of alignment and timing of saw grinder machines.

Performance criteria

- 2.1 Procedures for aligning components of saw grinder machines are explained in accordance with manufacturer's recommendations.
- 2.2 Timing principles for plunge and profile grinders are identified and explained in accordance with manufacturer's recommendations.
- 2.3 Principles for obtaining full backed tooth profiles are explained.

Outcome 3

Demonstrate knowledge of the maintenance of saw grinders.

Performance criteria

- 3.1 Methods required for maintaining grinders in good working order are described.
Range includes but is not limited to – regular cleaning and inspection, checking for defects and faults, coolant ratios.
- 3.2 Parts and components that wear are identified and maintenance procedures are explained in terms of wet and dry applications.
- 3.3 Effects of worn parts on grinder machine performance and alignment are explained.
Range may include but is not limited to – faceplate, cone screws, feed fingers, bearings, saw support system.
- 3.4 Machine maintenance schedule requirements are explained in accordance with manufacturer's recommendations.

Outcome 4

Demonstrate knowledge of health and safety requirements when operating saw grinders.

Performance criteria

4.1 Safety procedures when operating saw grinders are described.

Range personal protective equipment, workplace safety requirements, Safety Data Sheets.

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	25 November 2000	31 December 2020
Review	2	18 December 2006	N/A
Review	3	24 September 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.