

<b>Title</b>	<b>Grind finger jointer cutterhead in solid wood manufacturing</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>15</b>

<b>Purpose</b>	People credited with this unit standard are able to: manage hazards associated with grinding a finger jointer cutterhead in solid wood manufacturing; demonstrate knowledge of the operation and operating principles of a grinder; prepare grinder; mount and adjust cutterhead; grind a finger jointer cutterhead; and store cutterhead.
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<b>Classification</b>	Solid Wood Manufacturing > Finger Jointing
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<b>Available grade</b>	Achieved
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<b>Prerequisites</b>	Unit 15060, <i>Maintain finger jointer cutterhead in solid wood manufacturing</i> ; and Unit 669, <i>Demonstrate knowledge of grinding wheels and fluids</i> ; or demonstrate equivalent knowledge and skills.
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### Guidance Information

- 1 Legislation  
Health and Safety at Work Act 2015.  
Resource Management Act 1991.
- 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.  
*Tool room operator* refers to the person responsible for the grinding, installation and maintenance of finger jointing cutterheads at a workplace.  
*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 Range  
Competence must be demonstrated using one of the two standard cutterhead types used in New Zealand, solid profile or milled to pattern.

#### 4 Assessment information

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

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### Outcomes and performance criteria

#### Outcome 1

Manage hazards associated with grinding a finger jointer cutterhead in solid wood manufacturing.

#### Performance criteria

1.1 Hazards associated with grinding a finger jointer cutterhead are identified and actions to be taken to manage the hazards are applied.

Range hazards may include but are not limited to – handling cutterheads, grinding wheel disintegration, loose grinding wheel, exposure to grinding coolant.

1.2 Safe work practices associated with grinding a finger jointer cutterhead are identified and applied.

Range practices may include but are not limited to – isolation procedures, lock-outs, emergency stops, machine guarding, wearing of appropriate safety equipment.

#### Outcome 2

Demonstrate knowledge of the operation and operating principles of a grinder.

#### Performance criteria

2.1 Purpose and function of the grinder are explained in accordance with manufacturer's instructions.

2.2 Operating capability of the grinder is explained in accordance with manufacturer's instructions.

2.3 Operating components of the grinder are explained in accordance with manufacturer's instructions.

Range components may include but are not limited to – grinding wheel, dividing head, arbor, filter, coolant pump.

2.4 Roles and responsibilities of the tool room operator in terms of grinding are described.

#### Outcome 3

Prepare grinder.

**Performance criteria**

- 3.1 Grinder and work area are cleaned.
- 3.2 Grinding wheel and grinder speed are selected to suit cutter steel and grinder operation in accordance with manufacturer's instructions.
- 3.3 Grinding wheel is checked for faults, and action is taken where required.
- Range faults – cracks, clogging;  
action – replacement, dressing or shaping.
- 3.4 Grinding wheel is prepared, and grinder operation is checked in accordance with manufacturer's instructions.
- Range true running, vibration.
- 3.5 Grinding angle is set in accordance with manufacturer's instructions.
- 3.6 Grinder feed and increments are set in accordance with manufacturer's instructions.

**Outcome 4**

Mount and adjust cutterhead.

**Performance criteria**

- 4.1 Cutterhead is locked to the arbor according to manufacturer's instructions.
- 4.2 Dividing head is set in accordance with manufacturer's instructions.
- 4.3 Clearance between grinding wheel and cutters is adjusted in accordance with manufacturer's instructions.
- 4.4 Grinding coolants are handled and stored.

**Outcome 5**

Grind a finger jointer cutterhead.

**Performance criteria**

- 5.1 Operation of grinder is checked after the first pass.
- 5.2 Coolant flow rate and cleanliness are maintained during wet grinding.
- 5.3 Cutterheads are ground until the specified edge and cutting angles are obtained across all cutters.

5.4 Cutterhead edges are sharpened to the hook gauge or specified angle, to be free from defects and to be concentric.

Range burning, chipping, grinding marks.

5.5 Grinder is cleaned in accordance with manufacturer's instructions.

### Outcome 6

Store cutterhead.

### Performance criteria

6.1 Cutterhead is drained, if applicable.

6.2 Cutterhead is stored for safety, and to avoid moisture and dust.

6.3 Records are completed.

<b>Planned review date</b>	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	10 February 1999	31 December 2018
Revision	2	14 March 2000	31 December 2018
Revision	3	15 December 2000	31 December 2018
Review	4	18 December 2006	31 December 2018
Review	5	19 March 2010	31 December 2018
Review	6	20 November 2014	31 December 2022
Review	7	25 June 2020	31 December 2022
Reinstatement	8	24 June 2021	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	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](mailto:qualifications@competenz.org.nz) if you wish to suggest changes to the content of this unit standard.