

Title	Make straight cutters		
Level	2	Credits	3

Purpose	People credited with this unit standard are able to: manage hazards associated with making straight cutters; prepare to cut and grind straight cutters; cut and grind straight cutters; hone and balance straight cutters; and store straight cutters.
----------------	--

Classification	Solid Wood Manufacturing > Timber Machining
-----------------------	---

Available grade	Achieved
------------------------	----------

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.
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 meet workplace procedures and accepted industry practice.
- 4 Recommended unit standard for entry: Unit 669, *Demonstrate knowledge of grinding wheels and fluids*.

Outcomes and performance criteria

Outcome 1

Manage hazards associated with making straight cutters.

Performance criteria

1.1 Hazards associated with making straight cutters are identified and actions to be taken to manage the hazards are described.

Range hazards may include but are not limited to – tools left in the machine, components coming loose, guards not in place, loose clothing, inadvertent starting of the machine, noise; evidence of four is required.

1.2 Safe work practices associated with making straight cutters 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

Prepare to cut and grind straight cutters.

Performance criteria

2.1 Cutter steel is selected, and reasons for selection are explained.

Range reasons may include but are not limited to – thickness, composition, timber species, planer capability, dimensions, numbers, flat or serrated; evidence of four is required.

2.2 Reasons for making cutters from the same steel bar are explained.

Range reasons may include but are not limited to – density, tolerances, serrations, balance; evidence of two is required.

2.3 Cutter-making equipment is readied and checked for wear.

Range cut-off wheel, grinder.

2.4 Grinding wheel is selected and dressed to suit cutter steel and grinder.

2.5 Cutter steel is marked to size for required length.

Outcome 3

Cut and grind straight cutters.

Performance criteria

3.1 Cutters are manufactured in pairs or sets from the same steel stock and marked for identification.

- 3.2 Cutters are cut without overheating the metal.
- 3.3 Faces and sides are ground and honed free of burrs.
- 3.4 Cutting edges are ground to the specified angle and are free from defects.
Range burning, chipping.
- 3.5 Poor cutter manufacture is explained in terms of the impact of defects on product quality.
Range defects include – burning, imbalance, different serrations.

Outcome 4

Hone and balance straight cutters.

Performance criteria

- 4.1 Cutters are honed free of burrs.
- 4.2 Non-cutting edges are eased to prevent possible injury.
- 4.3 Cutters are balanced statically.
- 4.4 Cutters are checked and free of defects.
Range burns, marks, chips.

Outcome 5

Store straight cutters.

Performance criteria

- 5.1 Cutters are cleaned of all foreign matter.
- 5.2 Cutters are stored safely to avoid dust, moisture, and damage.
- 5.3 Records are completed.

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	27 January 1994	31 December 2012
Review	2	24 October 1996	31 December 2012
Review	3	10 February 1999	31 December 2012
Review	4	18 December 2006	31 December 2012
Review	5	15 April 2011	N/A
Review	6	25 June 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 qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.