

<b>Title</b>	<b>Demonstrate knowledge of timber machining</b>		
<b>Level</b>	<b>2</b>	<b>Credits</b>	<b>6</b>

<b>Purpose</b>	People credited with this unit are able to demonstrate knowledge of: principles of timber machining and safety practices; the operating principles of the timber machine; and factors affecting the finished quality of machined timber.
----------------	--

<b>Classification</b>	Wood Manufacturing - Generic Skills > Wood Manufacturing Foundation Skills
-----------------------	--

<b>Available grade</b>	Achieved
------------------------	----------

---

### 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.

*Timber machine* refers to either a planer or a moulder.

*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 timber machining and safety practices.

**Performance criteria**

1.1 Purpose of timber machining is explained.

Range purpose – adding value to sawn timber product, meeting customer requirements.

1.2 Machined timber profiles are identified from given samples, for both structural and appearance grades of timber.

Range structural – gauged, dressed four sides;  
appearance – weatherboards (bevel back and rusticated),  
mouldings (scotia, architrave), tongue and groove profiles.

1.3 Safety practices required of personnel in the planer mill are identified.

**Outcome 2**

Demonstrate knowledge of the operating principles of the timber machine.

**Performance criteria**

2.1 Components of a timber machine are identified.

Range components include but is not limited to – feed system, fences, pressures, chip breakers, extraction system, electrical controls, cutterheads and cutters.

2.2 Differences between timber machines are identified in terms of operating speeds and throughput size options.

2.3 Importance of correct orientation of feed stock to ensure best product and least downgrade.

Range cup, crook, bow.

2.4 Purpose of docking is explained.

Range purpose includes but is not limited to – preventing machine damage and product downgrade.

2.5 Basic machine maintenance requirements are explained.

Range includes but is not limited to – housekeeping, lubrication, pulleys and drives, extraction system.

**Outcome 3**

Demonstrate knowledge of factors affecting the finished quality of machined timber.

**Performance criteria**

3.1 Effects on the finish quality of machine and timber variables are explained.

Range machine variables – cutter pitch, feed speed;  
timber variables – moisture content, grade, age.

3.2 Importance of balancing cutter equipment is described.

Range personal danger, potential equipment damage, reduction in timber finish quality.

3.3 Factors determining feed speed are explained.

Range end use applications, machine capability.

3.4 Machine defects are identified, and their cause explained.

Range defects may include but are not limited to – sniping, burning, raised grain, chattering.

<b>Planned review date</b>	31 December 2024
----------------------------	------------------

**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	10 February 1999	31 December 2014
Revision	2	12 December 2000	31 December 2014
Review	3	18 December 2006	31 December 2014
Review	4	18 April 2013	N/A
Review	5	28 May 2020	N/A

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