

Title	Refine wood chips and glue fibre		
Level	4	Credits	20

Purpose	People credited with this unit standard are able to: explain fundamentals of refining and gluing systems; operate a refining and gluing system; and monitor and control the performance of a refining and gluing system.
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Classification	Wood Fibre Manufacturing > Composite Wood Panel Manufacturing
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Available grade	Achieved
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Explanatory notes

- 1 This unit standard is intended for work-based assessment. While all evidence requirements must be met, some range statements within this unit standard are indicative and dependent on enterprise and worksite specific equipment, procedures, and practices.
- 2 The following apply to the performance of all outcomes of this unit standard:
 - a All work practices must meet recognised codes of practice and documented worksite health and safety and environmental procedures (where these exceed code) for personal, product and worksite health and safety, and must meet the obligations required under current legislation, including the Health and Safety in Employment Act 1992, the Resource Management Act 1991, and their subsequent amendments.
 - b All work practices must meet documented worksite quality management procedures. This includes the recording (by electronic or non-electronic means) of activities, events, and decisions.
 - c All communications must be made in accordance with worksite procedures for content, recipient, timing and method.
- 3 **Definition**
Worksite policies and procedures refer to documented policies and to documented or other directions provided to staff. These must conform to legislation, and include, but are not limited to, ways of managing health and safety, environmental considerations, quality, and production. Examples include standard operating procedures, company health and safety plans, on-site briefings, and supervisor's instructions.

Outcomes and evidence requirements

Outcome 1

Explain fundamentals of refining and gluing systems in accordance with worksite policies and procedures.

Evidence requirements

- 1.1 Principles, purpose and operation of the refining and gluing system in wood panel manufacture are explained.
- 1.2 The operating parameters and capability of the components of refining and gluing systems are explained.
- Range minimum and maximum dimensions of – input material, feed speeds, steam pressure, hydraulic gap positioning.
- 1.3 Operating components and process controls of the components of refining and gluing systems are identified and their purpose is explained.
- Range refiner may include but is not limited to – screw feeders, refiner plates and/or discs and controls, hydraulic systems, lubrication systems, electric motor, distributed control system; blowline (if applicable) may include but is not limited to – resin and other additives supply, pump.
- 1.4 Hazards associated with the refining and gluing systems are identified and the role of protective equipment and safety features is explained.
- Range hazards may include but are not limited to – heat, steam, pressure, chemicals; safety features may include but are not limited to – personal protective equipment, hold cards, lockouts, stop buttons, control mechanisms, steam safety valves, overpressures.
- 1.5 The consequences of non-conformance with worksite standards are described.

Outcome 2

Operate a refining and gluing system in accordance with worksite policies and procedures.

Evidence requirements

- 2.1 Equipment is set up, started up, operated, and shut down.
- Range set up includes but is not limited to – refiner plate change and plate touch up.
- 2.2 Chips are pre-steamed and pre-heated for temperature and time.

- 2.3 Equipment faults and malfunctions are identified and corrective action is taken.
 Range equipment faults and malfunctions – electrical, mechanical, hydraulic, pneumatic, instrumentation.
- 2.4 Waste material is processed.
- 2.5 Preventative maintenance and cleaning requirements are explained and applied.

Outcome 3

Monitor and control the performance of a refining and gluing system in accordance with worksite policies and procedures.

Evidence requirements

- 3.1 Monitoring and interpretation of feedback information, and adjustment of control parameters, enable process requirements, plant performance, and product quality to be maintained.
 Range control parameters includes but is not limited to – temperature, pressure;
 plant performance includes but is not limited to – power loadings, energy efficiencies.
- 3.2 Output of additive system is monitored for composition and application rate of additive(s).
- 3.3 Output product meets the requirements for fibre quality and glue coverage.
- 3.4 Production rate is maintained.
- 3.5 Production, maintenance and quality records are completed.

Planned review date	31 December 2016
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 January 1995	31 December 2011
Review	2	24 November 1995	31 December 2011
Revision	3	12 February 1998	31 December 2011
Review	4	25 March 1999	31 December 2011
Review	5	29 March 2005	31 December 2011
Rollover and Revision	6	23 February 2007	31 December 2012
Review	7	20 October 2011	N/A

Consent and Moderation Requirements (CMR) reference

0173

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMRs). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact the Competenz at info@competenz.org.nz if you wish to suggest changes to the content of this unit standard.