Title	Prepare wood furnish for particle board manufacture		
Level	4	Credits	5

Purpose	People credited with this unit standard are able to: explain fundamentals of wood furnish preparation for particle board manufacture; operate and maintain mills, screens, and sifters; and monitor and control the performance of mills, screens, and sifters.

Classification	Wood Fibre Manufacturing > Composite Wood Panel Manufacturing
----------------	---

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

Entry information	
Recommended skills and knowledge	Unit 694, <i>Dry wood furnish for composite panels manufacture</i> .

Explanatory notes

- 1 This unit standard covers the preparation of particles for both three-layer sandwich and graded density forming processes.
- 2 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.
- 3 The following apply to the performance of all outcomes of this unit standard:
 - 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. They must also 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 of these Acts.
 - 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.

4 Definitions

Mills refer to hammermills and/or refiner mills as appropriate to the learner's own worksite.

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 wood furnish preparation for particle board manufacture in accordance with worksite policies and procedures.

Evidence requirements

- 1.1 The purpose of mills, screens, and sifters in the wood fibre preparation process is described.
- 1.2 The operating parameters and capability of mills, screens, and sifters are explained.

Range

may include but are not limited to – minimum and maximum dimensions of input wood fibre, feed speeds, moisture content of input wood fibre, screen and mesh dimensions, maximum amperage.

1.3 Operating components and process controls of mills, screens, and sifters are identified and their purpose is explained.

Range

mills may include but are not limited to – screens, blades, reject system;

sifters may include but are not limited to – vacuum control, emission control:

process controls may include but are not limited to – distributed control systems (DCS), programmable logic controllers (PLC).

1.4 Hazards associated with furnish preparation are identified and the role of protective equipment and safety features is explained.

Range

hazards may include but are not limited to – noise, dust, screw feeds, fire, dust explosions;

safety features may include but are not limited to – personal protective equipment, electrical overload cut-outs, stop buttons, guards.

1.5 The consequences of non-conformance with worksite operating procedures are described.

Outcome 2

Operate and maintain mills, screens, and sifters in accordance with worksite policies and procedures.

Evidence requirements

- 2.1 Mills, screens, and sifters are set up, started up, operated, and shut down.
- 2.2 Setting and adjustment of operating parameters enables production requirements to be achieved.

Range operating parameters may include but are not limited to – screens, vacuums:

production requirements may include but are not limited to – product quality, production rate.

- 2.3 Equipment faults and malfunctions are identified and corrective action is taken.
 - Range equipment faults and malfunctions electrical, mechanical, pneumatic, instrumentation.
- 2.4 Preventative maintenance and cleaning requirements for mills, screens and sifters are explained and applied.

Outcome 3

Monitor and control the performance of mills, screens, and sifters in accordance with worksite policies and procedures.

Evidence requirements

- 3.1 Analysis of output product, and adjustment of control parameters, enable process requirements, plant performance, and product quality to be maintained.
- 3.2 Output wood furnish meets the requirements for size fractions and removal of foreign objects.
- 3.3 Selection of next production stage for product and routing of output stock to further processing stages is carried out.
- 3.4 Production, maintenance and quality records are explained.

Planned review date	31 December 2016
---------------------	------------------

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 2012
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.nzga.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 (CMR). 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.