

Title	Form and press flash dried wood pulp		
Level	4	Credits	10

Purpose	People credited with this unit standard are able to: demonstrate knowledge of bale forming and pressing; form and press pulp bales; and monitor and control the performance of the forming and bale presses.
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Classification	Wood Fibre Manufacturing > Pulp Making
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Available grade	Achieved
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Guidance Information

1 Legislation and references

Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the:

- Hazardous Substances and New Organisms Act 1996;
- Health and Safety at Work Act 2015;
- Resource Management Act 1991;
- Health and Safety at Work (Major Hazard Facilities) Regulations 2016.

2 Definitions

Operating parameters refer to the boundary conditions in which the operations are carried out in forming and pressing pulp bales.

Operating procedures refer to the process(es) that are worked through, e.g. standard operating procedure (SOP) in forming and pressing pulp bales.

Worksite documentation refers to organisation policies and procedures that are documented in memo, electronic, or manual format and available in the workplace, and are consistent with manufacturer's requirements. 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, sustainability, on-site briefings, supervisor's instructions, and procedures to comply with legislative and local body requirements relevant to the pulp making industry.

3 Assessment information

Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable service information, worksite documentation and legislative requirements. This includes the knowledge and use of suitable tools and equipment.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of bale forming and pressing.

Performance criteria

- 1.1 Operation of the presses is explained.
- 1.2 Factors affecting the quality of bales are explained.
- Range factors may include but are not limited to – pulp moisture content, bale weight, air extraction, throughput, bale shape.
- 1.3 Operating parameters and capability of presses are explained.
- Range operating parameters may include but are not limited to – pressure, bale dimensions, bale weight, feed screw rates, pump loading, time in press, oil temperature, throughput.
- 1.4 Operating components and process controls of presses are described and their purpose and operation are explained.
- Range bale forming press components may include but are not limited to – pumps, cylinders, rams, chamber, feed screws, feed rollers, drop chutes, dampers, distributed control systems, fire extinguisher system, oil system;
bale press controls may include but are not limited to – pumps, cylinders, Distributed Control System (DCS), oil system, cross head, table, columns, loading arms, strain gauge.
- 1.5 Hazards associated with presses are identified and actions to be taken to minimise, or eliminate the hazards are explained.
- Range hazards may include but are not limited to – hydraulic pressure, heat, hot oil at pressure, moving plant components, fire, heights.
- 1.6 Consequences of non-conformance with worksite operating procedures are explained.
- 1.7 Roles and responsibilities of the bale form and press operator are explained.

Outcome 2

Form and press pulp bales.

Performance criteria

- 2.1 Safe work practices associated with forming and pressing pulp bales are demonstrated.
- Range practices may include but are not limited to – isolation procedures, lock-outs or tag-outs, emergency stops, machine guarding, wearing appropriate safety equipment.
- 2.2 Presses are set up, started up, operated, and shut down.
- Range operation – manual, automatic.
- 2.3 Operating parameters are set and adjusted to enable production requirements to be achieved.
- Range operating parameters may include but are not limited to – pressure, feed screw rates, pump loading, time in press, oil temperature.
production requirements may include but are not limited to – bale dimensions, bale weight, production rate.
- 2.4 Essential care and housekeeping requirements of the presses and press area are carried out.

Outcome 3

Monitor and control the performance of the forming and bale presses.

Performance criteria

- 3.1 Performance of the forming and bale press is monitored and parameters are controlled in accordance with operating parameters.
- Range control parameters may include but are not limited to – press speed, dwell time, bale dimension, pressure.
- 3.2 Operating and equipment faults and malfunctions are identified, and relevant corrective actions are taken.
- Range operating faults may include but are not limited to – blockages; equipment faults and malfunctions may include but are not limited – mechanical, electrical, hydraulic, instrumentation, distributed control system.
- 3.3 Contaminant levels, dimensions, and weight of output bales are monitored to meet specified requirements.
- 3.4 Production rate is regulated and adjusted to meet downstream operation requirements.
- 3.5 Production and quality records are completed.

Planned review date	31 December 2028
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	22 February 1995	31 December 2024
Revision	2	27 January 1997	31 December 2024
Review	3	25 February 1999	31 December 2024
Review	4	18 December 2006	31 December 2024
Review	5	24 October 2014	31 December 2025
Review	6	30 November 2023	N/A

Consent and Moderation Requirements (CMR) reference	0173
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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 Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council qualifications@hangaarorau.nz if you wish to suggest changes to the content of this unit standard.