

Title	Form bales from wood pulp sheet		
Level	3	Credits	10

Purpose	People credited with this unit standard are able to: demonstrate knowledge of bale forming; operate bale forming equipment; and monitor and control the performance of bale forming.
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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 Definition

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.

Performance criteria

- 1.1 Operation of bale forming equipment is explained.
- Range layboy, conveyors, tables, rolls, cutter knives, dividers, tapes and finger bars, sheet vibrators, discharge by count, and load cell weight.
- 1.2 Process parameters and capability of bale forming equipment are explained.
- Range bale forming parameters include – drive speed, moisture content, sheet dimensions.
- 1.3 Operating components and process controls of bale forming are described and their purpose is explained.
- Range operating components may include but are not limited to – slitters, conveyors, cutter knife, bale press.
- 1.4 Hazards associated with bale forming equipment are identified and actions to be taken to minimise, or eliminate the hazards are explained.
- Range hazards may include but are not limited to – moving equipment, automatic processes, noise, hydraulic oil under pressure.
- 1.5 Consequences of non-conformance of bale forming with worksite operating procedures are explained.
- Range bale dimensions and weight, moisture content, markings, presentation.
- 1.6 Roles and responsibilities of the bale former operator are explained.

Outcome 2

Operate bale forming equipment.

Range cutter layboy and associated conveyors.

Performance criteria

- 2.1 Safe work practices associated with operating bale forming equipment 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 Bale forming equipment is set up, started up, operated, and shut down.

2.3 Operating parameters are set and adjusted to enable production requirements to be achieved.

Range operating parameters – cutter knife speed, conveyor tape speeds, layboy lowering rates;
production requirements – sheet dimensions, bale height, bale weight, production rate.

2.4 Essential care and housekeeping requirements are carried out.

Outcome 3

Monitor and control the performance of bale forming.

Performance criteria

3.1 Bale forming is monitored and parameters are controlled in accordance with operating parameters.

3.2 Operating and equipment faults and malfunctions are identified, and relevant corrective actions are taken.

Range equipment faults and malfunctions – mechanical, electrical, instrumentation, distributed control system.

3.3 Dimensions, weight and moisture content of output bales are monitored to meet specified requirements.

3.4 Production rate is regulated to suit pulp machine production.

3.5 Product and process testing is carried out.

Range on-line testing, off-line testing.

3.6 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

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.