

Title	Operate an extended nip press to press wet pulp or paper webs		
Level	4	Credits	5

Purpose	People credited with this unit standard are able to: demonstrate knowledge of an extended nip press; operate an extended nip press; and monitor and control the performance of an extended nip press.
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Classification	Wood Fibre Manufacturing > Pulp and Paper Manufacturing Skills
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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 operating an extended nip press.

Operating procedures refer to the process(es) that are worked through, e.g. standard operating procedure (SOP) operating an extended nip press.

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 and paper 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.

- 4 Recommended skills and knowledge:
Unit 3519, *Press wet pulp and paper webs in the pulp or paper manufacturing industry*; or demonstrate equivalent knowledge and skills.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of an extended nip press.

Performance criteria

- 1.1 Principles of the operation of the extended nip press section are explained.
- Range principles may include but are not limited to – action of the drive, draw control, roll types, felt runs, felt conditioning, loads, nip pressures, Wahlstrom theory, extended nip theory, water removal, controlled crown rolls, shoes, surface characteristics, temperature.
- 1.2 Hazards associated with operation of the extended nip press are identified and actions to be taken to minimise, or eliminate the hazards are described.
- Range hazards may include but are not limited to – heat, pressure, hydraulic oil spillage, height, weights.
- 1.3 Operating parameters and capability of the extended nip press are explained.
- Range operating parameters may include but are not limited to – pressures, temperature, dwell time.
- 1.4 Operating components and process controls of extended nip press are described and their purpose and operation are explained.
- Range operating components may include but are not limited to – belt, rolls, felts, shoe, hydraulic system, felt guiding system, felt cleaning system.
- 1.5 Consequences of non-conformance of extended nip pressing with worksite operating procedures are described.
- 1.6 Roles and responsibilities of the nip press operator are described.

Outcome 2

Operate an extended nip press.

Performance criteria

- 2.1 Safe work practices associated with operating and maintaining an extended nip press are identified and used.
- 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 Extended nip press is set up, started up, operated, and shut down.
- Range loads, pressures, rolls, felt tensions, felt guiding, showers.
- 2.3 Essential care and housekeeping requirements are carried out.

Outcome 3

Monitor and control the performance of an extended nip press.

Performance criteria

- 3.1 Performance of an extended nip press is monitored and parameters are controlled in accordance with operating parameters.
- Range control parameters may include but are not limited to – loads, pressures, felt tension, felt guiding, showers; performance parameters may include but are not limited to – grammage, moisture content, creasing.
- 3.2 Operating and equipment faults and malfunctions are identified and relevant corrective actions are taken.
- Range operating faults and malfunctions may include but are not limited to – felt condition, guidance failure, press failure.
- 3.3 Operating parameters are set and adjusted to enable production requirements to be met.
- Range operating parameters may include but are not limited to – pressures, temperature, dwell time, felt tension, felt guiding; production requirements may include but are not limited to – moisture content, moisture profile, production rate.
- 3.4 Output web moisture profile, absence of defects, and thickness are monitored to meet specified requirements.
- 3.5 Production, maintenance, 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	18 December 2006	31 December 2024
Review	2	24 October 2014	31 December 2025
Review	3	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.