Title | Press wet pulp and paper webs using an extended nip press
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Level | 4  
Credits | 5

**Purpose**

People credited with this unit standard are able to: explain fundamentals of extended nip pressing; operate and maintain an extended nip press efficiently; and monitor and control the efficient performance of an extended nip press.

**Classification**

Wood Fibre Manufacturing > Pulp and Paper Manufacturing Skills

**Available grade**

Achieved

**Explanatory notes**

1. **Definition**

*Worksite documentation* refers to instructions to staff on policy and procedures (including the application of legislation to worksite situations) which are formally documented, and are available for reference at the worksite. Examples are standard operating procedures, specifications, manuals, and manufacturer’s information.

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 operating procedures. This includes the recording (by electronic or non-electronic means) of activities, events, and decisions.

   c. All communications made in relation to this unit standard must be made in accordance with worksite procedures for content, recipient, timing, and method.
Outcomes and evidence requirements

Outcome 1

Explain fundamentals of extended nip pressing.

Evidence requirements

1.1 Principles of the operation of the extended nip press section are explained in accordance with worksite documentation.

Range may include but is 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 isolate, minimise, or eliminate the hazard are described in accordance with worksite documentation.

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 in accordance with worksite documentation.

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 identified and their purpose and operation are explained in accordance with worksite documentation.

Range 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 in accordance with worksite documentation.

1.6 Roles and responsibilities of the nip press operator are described in accordance with worksite documentation.

Outcome 2

Operate and maintain an extended nip press efficiently.
Evidence requirements

2.1 Safe work practices associated with operating and maintaining an extended nip press are identified and used in accordance with worksite documentation and legislative requirements.

Range practices may include but are not limited to – isolation procedures, lock-outs, emergency stops, machine guarding, wearing appropriate safety equipment.

2.2 Extended nip press is set up, started up, operated, and shut down efficiently in accordance with worksite documentation.

Range loads, pressures, rolls, felt tensions, felt guiding, showers.

2.3 Output web meets the requirements of worksite documentation for moisture profile, absence of defects, and thickness.

2.4 Setting and timely adjustment of operating parameters enables production requirements to be met in accordance with worksite documentation.

Range operating parameters may include but are not limited to – pressures, temperature, dwell time, felt tension, felt guiding; production requirements – moisture content, moisture profile, production rate.

2.5 Preventative maintenance and cleaning requirements are carried out in accordance with worksite documentation.

Outcome 3

Monitor and control the efficient performance of an extended nip press.

Evidence requirements

3.1 Monitoring and interpretation of feedback information and the timely adjustment of control parameters enable product quality, efficient plant performance, and process and legislative requirements to be maintained in accordance with worksite documentation.

Range control parameters – loads, pressures, felt tension, felt guiding, showers; product quality – grammage, moisture content, creasing.

3.2 Operating and equipment faults and malfunctions are identified, and corrective action is taken, in accordance with worksite documentation.

Range operating faults and malfunctions – felt condition, guidance failure, press failure.

3.3 Production, maintenance, and quality records are explained and completed in accordance with worksite documentation.
Planned review date | 31 December 2019

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Consent and Moderation Requirements (CMR) reference | 0173

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 Competenz qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.