

Title	Form paper web from wood pulp furnish		
Level	4	Credits	25

Purpose	People credited with this unit standard are able to: explain the fundamentals of paper web forming; operate and maintain a paper web forming section efficiently; and monitor and control the efficient performance of a paper web former.
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Classification	Wood Fibre Manufacturing > Paper Making
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Available grade	Achieved
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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 Range
Formers may include – multi wire, fourdrinier.
Evidence is required for one.
- 3 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 the fundamentals of paper web forming.

Evidence requirements

- 1.1 Purpose of wet sheet formation is explained in accordance with worksite documentation.
- 1.2 Operating principles of paper web formers are explained in accordance with worksite documentation.
- Range may include but is not limited to – fabric speed, jet speed, efflux ratio, headbox angle, slice configuration, profile adjustment, drainage, basis weight, couching, web formation, freeness, consistency, wet line.
- 1.3 Operating components and process controls of web formers are identified, and their purpose and operation are explained, in accordance with worksite documentation.
- Range operating components may include but are not limited to – wire and fabric guiding, vacuum, headbox, water deflectors, deckles, cleaning showers, doctors, return rolls, forming boards, edge bleeds, distributed control system.
- 1.4 Operating parameters and capability of a web former at the candidate's worksite are explained in accordance with worksite documentation.
- Range slice configuration, stock temperature and consistency, efflux ratio, headbox level and pressure, circulation flow, freeness.
- 1.5 Hazards associated with web formers 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, steam, moving equipment, pressure.
- 1.6 Consequences of non-conformance of web forming with worksite operating procedures are described in accordance with worksite documentation.
- 1.7 Roles and responsibilities of the web former operator are described in accordance with worksite documentation.

Outcome 2

Operate and maintain a paper web forming section efficiently.

Evidence requirements

- 2.1 Safe work practices associated with operating and maintaining a paper web forming section are demonstrated 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 Forming section is set up, started up, operated, and shut down efficiently in accordance with worksite documentation.
- 2.3 Setting and adjustment of operating parameters enables production requirements to be achieved in accordance with worksite documentation.
- Range operating parameters may include but are not limited to – slice configuration, stock temperature and consistency, efflux ratio, headbox level and pressure, circulation flow, freeness; production requirements may include but are not limited to – change single to double ply, change double to single ply, grammage ratios, thickness, grammage, porosity, paper strength properties, sheet formation.
- 2.4 Preventative maintenance and cleaning requirements for the forming section are carried out in accordance with worksite documentation.
- Range may include but is not limited to – equipment checks, tracking adjustments, wash-up schedules, cleaning chemicals.

Outcome 3

Monitor and control the efficient performance of a paper web former.

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.
- 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 – consistency changes, abnormal formation variations, fabric and shower performance; equipment faults and malfunctions – electrical, mechanical, instrumentation, distributed control system.
- 3.3 Production rate is regulated in accordance with worksite documentation and process requirements.

- 3.4 Output paper meets quality requirements identified in worksite documentation.
- 3.5 Production, maintenance, and quality records are explained and completed in accordance with worksite documentation.

Planned review date	31 December 2019
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 February 1999	N/A
Review	2	18 December 2006	N/A
Review	3	24 October 2014	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>.

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.