

Title	Operate a reel to roll converting machine with automated mandrel extraction system		
Level	4	Credits	8

Purpose	People credited with this unit standard are able to: demonstrate knowledge of the operation of a reel to roll converting machine with automated mandrel extraction system; operate a reel to roll converting machine with automated mandrel extraction system; and monitor and control the performance of a reel to roll converting machine with automated mandrel extraction system, producing tissue products.
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Classification	Wood Fibre Manufacturing > Tissue Converting
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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:

- Health and Safety at Work Act 2015
- Resource Management Act 1991.

Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.

2 Definitions

Manufacturer's instructions refer to instructions provided by manufacturers of substances, equipment, and machinery. These instructions may include – details on safe and correct handling, use and storage of substances and/or details on substance properties. Examples are – labels on substance containers, product data sheets, and operator's manuals.

Tissue products refer to bathroom tissue, towels, napkins, facial tissue.

Worksite policies and procedures refer to documented policies and to documented or other directions provided to staff. These include, but are not limited to, – ways of managing health and safety, environmental considerations, quality, and production, and must conform to legislation. Examples include standard operating procedures, company health and safety plans, on-site briefings, and supervisor's instructions.

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 policies and procedures and legislative requirements. This includes the knowledge and use of worksite specific equipment, procedures, and practices. This unit standard may be assessed in the workplace using naturally occurring evidence or in a simulated environment that demands performance equivalent to that required in the workplace. All activities and evidence must be in accordance with worksite policies and procedures.

This unit standard does not include loading and threading up of raw materials or the changeover of a reel to roll converting machine with an automated mandrel extraction system.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of the operation of a reel to roll converting machine with automated mandrel extraction system producing tissue products.

Performance criteria

- 1.1 The operation and capacity of a reel to roll converting machine with an automated mandrel extraction system is described.
- 1.2 The purpose of the operating components and process controls of a reel to roll converting machine with an automated mandrel extraction system are explained.

Range operating components and process controls may include but are not limited to – unwind stands, embossers, draw-rolls, perforation blades, bedrolls, mandrels, cut-off knives, slitting knives, score cutters, gearing, cams, transport chains, mandrel inserter, mandrel extraction, ply bonder units, water spray nozzles, core stop, core hopper, switches, drive chains and belts, anvils, electronic sensors, mount hope rollers, computer control system, transfer conveyors.
evidence of ten operating components and two process controls are required.

- 1.3 Hazards associated with a reel to roll converting machine with an automated mandrel extraction system and the role of relevant protective equipment and safety features are explained.

Range hazards may include but are not limited to – in running nips, moving parts, automated processes, sharp edges, hot materials and machine parts, chemicals, noise; evidence of four hazards is required.
evidence of a minimum of five is required.
safety features include but are not limited to – safety isolation procedures, lockouts, emergency stops, guards, light curtains.

- 1.4 The consequences of non-conforming product are explained.

Outcome 2

Operate a reel to roll converting machine with automated mandrel extraction system producing tissue products.

Performance criteria

- 2.1 Reel to roll converting machine with automated mandrel extraction system is started up, operated, and shut down.
- 2.2 Production requirements are achieved by setting and/or adjustment of the system.
- Range production requirements include – product quality, production rate.
- 2.3 Non-conforming reels are rejected and reported.
- 2.4 Lubrication and oil levels are maintained in accordance with manufacturer's instructions.
- 2.5 The reel to roll converting machine, equipment, and work area are cleaned.

Outcome 3

Monitor and control the performance of a reel to roll converting machine with automated mandrel extraction system producing tissue products.

Performance criteria

- 3.1 Productivity and quality is maintained by monitoring performance and adjustment of control parameters.
- 3.2 Product quality checks are carried out.
- 3.3 Utilisation targets are maintained and waste is minimised.
- 3.4 Rejection of non-conforming product is carried out.

3.5 Waste is minimised and recycled.

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	19 March 2010	31 December 2025
Review	2	29 June 2023	N/A

Consent and Moderation Requirements (CMR) reference	0013
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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.