

<b>Title</b>	<b>Operate a paper winder</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>15</b>

<b>Purpose</b>	People credited with this unit standard are able to: demonstrate knowledge of paper winding; set up the winder to run paper products; operate a paper winder; assess paper product quality and select paper product destination; and monitor and control the performance of a paper winder.
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<b>Classification</b>	Wood Fibre Manufacturing > Paper Making
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<b>Available grade</b>	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

*Customer reel* refers to the reel of paper from the paper winder.

*Operating parameters* refers to the boundary conditions in which the operations are carried out in paper winding.

*Operating procedures* refers to the process(es) that are worked through, e.g. standard operating procedure (SOP) in paper winding.

*Parent reel* refers to the reel of paper from the paper machine.

*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 paper 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.

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## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of paper winding.

#### Performance criteria

- 1.1 Principles and the operation of paper winders are explained.
- 1.2 Components of the winder are explained.
- Range components may include but are not limited to – rider drive rolls, tensioning unit, tension control programme, tables, slitter knives, trim chutes, spreader rolls and bars, threading and alignment systems, drives, reel ejection and lowerator, core rams and core chuck, hydraulic unit, backstand, clutch and braking systems.
- 1.3 Operating parameters and capability of the winder are explained.
- Range operating parameters may include but are not limited to – core sizes, tension controls, roll size and diameters.
- 1.4 Hazards associated with paper winding are identified and actions to be taken to minimise, or eliminate the hazards are described.
- Range hazards may include but are not limited to – moving plant, nips, knives, paper cuts, lifting.
- 1.5 Consequences of non-compliance with worksite operating procedures when operating a paper winder are described.
- Range consequences may include but are not limited to – customer production downtime, customer waste and/or rejects, customer complaints, loss of downstream customer orders.
- 1.6 Roles and responsibilities of the paper winder operator are described.

### Outcome 2

Set up the paper winder to run paper products.

**Performance criteria**

2.1 Product specifications are maintained by the setting of operating parameters in accordance with customer requirements.

Range operating parameters may include but are not limited to – parent reel diameter, customer roll diameter, knife settings and condition, tension, core chuck settings, core size, rider roll pressure, unwind stand setting (axial and radial), trim settings, torque differential.

2.2 Inspection and loading of cores into the winder is carried out.

2.3 Parent reels are positioned in the unwind stand.

2.4 Paper sheet is threaded through the winder.

**Outcome 3**

Operate a paper winder.

**Performance criteria**

3.1 Safe work practices associated with operating and maintaining a paper winder 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.

3.2 Paper winder is started up, operated, and shut down.

3.3 Quality of wound products is checked to meet customer specifications,

Range quality may include but is not limited to – roll dimensions, cut quality, and tape types, core selection, splicing quality, product tension, alignment of core and product, felt side in or out, winding quality, reel defects.

3.4 Winder production rate is matched with upstream and downstream production requirements.

3.5 Product specifications are maintained by the adjusting of operating parameters.

Range may include but is not limited to – spreader rolls and bars, speed, unwind stand position, tension, rider roll pressure, torque differential.

3.6 Set changes are completed.

3.7 Winder is prepared and operated for sheet joining.

3.8 Slitter knives are changed.

3.9 Trim chutes are cleared.

3.10 Essential care and housekeeping requirements are carried out.

#### **Outcome 4**

Assess paper product quality and select paper product destination.

##### **Performance criteria**

4.1 Customer reels with defects are identified and separated from the process.

Range core diameters and lengths, splices, paper defects, winding defects.

4.2 Customer reels are directed to the appropriate destination.

Range customer order, re-grade, alternative order, reject.

4.3 Customer reels are marked.

Range splices, unwind direction, alternative grade, reel identification marks.

4.4 Product quality is recorded in the worksite record system.

#### **Outcome 5**

Monitor and control the performance of a paper winder.

##### **Performance criteria**

5.1 Performance of a paper winder is monitored, and parameters are controlled in accordance with operating parameters.

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

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<b>Planned review date</b>	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	23 January 1998	31 December 2024
Revision	2	20 August 2002	31 December 2024
Review	3	18 December 2006	31 December 2024
Review	4	24 October 2014	31 December 2025
Review	5	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](mailto:qualifications@hangaarorau.nz) if you wish to suggest changes to the content of this unit standard.