

Title	Operate and maintain a paper winder		
Level	4	Credits	15

Purpose	People credited with this unit standard are able to: explain fundamentals of paper winding; set up the winder to run paper products; operate and maintain a paper winder efficiently; assess paper product quality and select paper product destination; and monitor and control the efficient performance of a paper winder.
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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

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

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

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, and subsequent and delegated legislation.
 - 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 paper winding.

Evidence requirements

- 1.1 Principles and the operation of paper winders are explained in accordance with worksite documentation.
- 1.2 Components of the winder are identified, and their purpose is explained, in accordance with worksite documentation.
- Range rider/drive rolls, tensioning unit, 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 in accordance with worksite documentation.
- Range operating parameters – core sizes, tension controls, roll size and diameters.
- 1.4 Hazards associated with paper winding 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 – moving plant, nips, knives, paper cuts, lifting.
- 1.5 Consequences of non-conformance with worksite operating procedures when operating a paper winder are described in accordance with worksite documentation.
- Range may include but is 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 in accordance with worksite documentation.

Outcome 2

Set up the winder to run paper products.

Evidence requirements

- 2.1 Product specifications are maintained by the setting of operating parameters in accordance with worksite documentation and 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 in accordance with worksite documentation.
- 2.3 Parent reels are positioned in the unwind stand in accordance with worksite documentation.
- 2.4 Paper sheet is threaded through the winder in accordance with worksite documentation.

Outcome 3

Operate and maintain a paper winder efficiently.

Evidence requirements

- 3.1 Safe work practices associated with operating and maintaining a paper winder 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.
- 3.2 Winder is started up, operated, and shut down efficiently in accordance with worksite documentation.
- 3.3 Wound product meets worksite and customer specifications for quality.
- 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 in accordance with worksite documentation.
- 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 in accordance with worksite documentation.
- 3.7 Winder is prepared and operated for sheet joining in accordance with worksite documentation.
- 3.8 Slitter knives are changed in accordance with worksite documentation.
- 3.9 Trim chutes are cleared in accordance with worksite documentation.
- 3.10 Preventative maintenance and cleaning requirements are carried out in accordance with worksite documentation.

Outcome 4

Assess paper product quality and select paper product destination.

Evidence requirements

- 4.1 Customer reels with defects are identified and separated from the process in accordance with worksite documentation.

Range core diameters and lengths, splices, paper defects, winding defects.
- 4.2 Customer reels are directed to the appropriate destination in accordance with worksite documentation.

Range customer order, re-grade, alternative order, reject.
- 4.3 Customer reels are marked in accordance with worksite documentation.

Range splices, unwind direction, alternative grade, reel identification marks.
- 4.4 Product quality is recorded in the worksite record system in accordance with worksite documentation.

Outcome 5

Monitor and control the efficient performance of a paper winder.

Evidence requirements

- 5.1 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.
- 5.2 Operating and equipment faults and malfunctions are identified, and corrective action is taken, 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	23 January 1998	N/A
Revision	2	20 August 2002	N/A
Review	3	18 December 2006	N/A
Review	4	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.