

<b>Title</b>	<b>Set up and test run a woollen card to card fibre</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>10</b>

<b>Purpose</b>	People credited with this unit standard are able to: demonstrate knowledge of carding machine set-up; prepare woollen card for operation; and test run woollen card to optimise machine settings.
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<b>Classification</b>	Textiles Manufacture > Woollen Yarn Processing
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 Legislation relevant to this unit standard includes but is not limited to the: Health and Safety at Work Act 2015.
- 2 Definition  
*Workplace procedures* refer to the procedures used by the organisation carrying out the work and applicable to the tasks being carried out. Examples are – standard operating procedures, safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, procedures to comply with legislative and local body requirements.
- 3 Assessment information
  - a All activities and evidence must be in accordance with workplace procedures.
  - b Competence will be demonstrated on a card used in the candidate's workplace.
- 4 Recommended skills and knowledge:  
Unit 4163, *Card fibre on a woollen card*.

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### Outcomes and performance criteria

#### Outcome 1

Demonstrate knowledge of carding machine set-up.

#### Performance criteria

- 1.1 Carding actions are described in terms of the way fibres are processed.  
  
Range working, raising, stripping, doffing, feed roller action, transferring.
- 1.2 Types of card clothing used in workplace are identified and described in terms of their features and function.

- 1.3 Card settings which may be changed during set-up and tuning are described in terms of their effect on carding process and product quality.
- Range hopper setting, feed rate, card roller settings, card roller speeds, condenser settings, draft, peralta.
- 1.4 Fibre types used in workplace are identified and described in terms of their carding performance.
- 1.5 Fibre lubricating oil quantity and type, moisture levels and atmospheric conditions are described in terms of their effect on fibre condition and carding performance.
- 1.6 Card setting calculations are demonstrated.
- Range may include – surface speed relationships, gear ratios, feed rate settings, count system calculations.

## Outcome 2

Prepare woollen card for operation.

### Performance criteria

- 2.1 Adjustments are made to card.
- 2.2 Card condition is checked.
- Range hopper and feed section, card wire, tapes, rubbers, peralta.
- 2.3 Card settings are adjusted to produce slubbing to specification.
- Range feed rate, card roller settings, card roller speeds, condenser settings, draft.

## Outcome 3

Test run woollen card to optimise machine settings.

### Performance criteria

- 3.1 Carding machine is operated.
- 3.2 Carded fibre is produced.
- 3.3 Test samples are taken.
- 3.4 Test results are assessed and machine adjustments made to achieve product quality requirements.
- Range count, neps, slubbing quality, colour effect.

<b>Planned review date</b>	31 December 2026
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#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	18 June 1995	31 December 2023
Revision	2	8 August 1997	31 December 2023
Revision	3	18 July 2000	31 December 2023
Revision	4	10 October 2001	31 December 2023
Revision	5	12 August 2004	31 December 2023
Review	6	23 April 2008	31 December 2023
Review	7	27 January 2022	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0030
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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 the 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.