

Title	Fettle a textile carding machine		
Level	3	Credits	5

Purpose	People credited with this unit standard are able to: describe fettling; prepare for fettling of a textile carding machine; hand fettle a textile carding machine; vacuum fettle swifts and doffers of a textile carding machine; vacuum fettle card rollers of a textile carding machine; keep machine and equipment clean and monitor condition.
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Classification	Textiles Manufacture > Core Yarn Processing
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Available grade	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 procedures used by the organisation carrying out the work and applicable to the tasks being carried out. Examples are – standard operating procedures, site safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, and 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 Competency is intended to be demonstrated on the type of carding machine installed in the candidate's workplace.

Outcomes and performance criteria

Outcome 1

Describe fettling.

Performance criteria

- 1.1 The process, factors and need for fettling are described.

Range may include but is not limited to – fettling technique, effect on carding performance, prevention of colour contamination, and prevention of fibre contamination.

Outcome 2

Prepare for fettling of a textile carding machine.

Performance criteria

2.1 Personal protective equipment is worn.

2.2 Machine isolation procedures are performed.

2.3 Machine is prepared for fettling.

Range may include but is not limited to – rollers free to rotate, rollers removed when necessary.

2.4 Vacuum equipment is prepared for fettling.

Range may include but is not limited to – pump, hoses, nozzle, traverse units, roller drive or drill.

2.5 Hand fettling tool is selected to suit the type of roller being fettled.

2.6 Protective pads and boards are in place to prevent damage to wire.

Outcome 3

Hand fettle a textile carding machine.

Performance criteria

3.1 Card rollers are cleaned and hand fettled.

Range may include but is not limited to – fibre removed, metallic wire degreased.

Outcome 4

Vacuum fettle swifts and doffers of a textile carding machine.

Performance criteria

4.1 Swifts and doffers are prepared for fettling.

Range may include but is not limited to – cylinder drive set, traverse unit in place, nozzle set.

4.2 Fibre is removed from roller.

Outcome 5

Vacuum fettle card rollers of a textile carding machine.

Performance criteria

5.1 Card rollers are vacuum fettled.

Range may include but is not limited to – fibre removed, metallic wire degreased.

Outcome 6

Keep machine and equipment clean and monitor condition.

Performance criteria

6.1 Undergrids and roller covers are cleaned and free of droppings.

6.2 Fettleings are sorted and collected.

6.3 Vacuum filters are cleaned and receiving bin is emptied.

6.4 Card wire is checked for wear and damage, and reporting procedures are followed where wear or damage is detected.

6.5 Card machine condition is monitored, and if required, reported.

Range may include but is not limited to – condition of roller belts, bearings, chains.

Replacement information	This unit standard replaced unit standard 4180 and unit standard 4181.
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Planned review date	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	24 March 2022	N/A

Consent and Moderation Requirements (CMR) reference	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 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.