

Title	Set up and test run a woollen spinning machine to spin yarn		
Level	3	Credits	10

Purpose	People credited with this unit standard are able to: demonstrate knowledge of spinning machine set-up; prepare woollen spinning machine for operation; and test run spinning machine to optimise machine settings.
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Classification	Textiles Manufacture > Woollen 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 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 woollen spinning machine used in the candidate's workplace.
- 4 Recommended skills and knowledge
Unit 4166, *Spin yarn on a woollen ring spinning machine*.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of spinning machine set-up.

Performance criteria

1.1 Spinning machine settings which may be changed during set-up and tuning are described in terms of their effect on spinning process and product quality.

Range draft, twist level, twist direction, spindle speed, machine speed, package build, traveller type, traveller size, lappets, false twist speed, spool tension, anti-snarl adjustment, doffing cycle.

1.2 Yarn tests are described and results analysed to confirm processing and product specification.

Range count, twist level, twist direction, strength, yarn evenness, strobe for spindle speed, and other tests carried out in the workplace.

Outcome 2

Prepare woollen spinning machine for operation.

Performance criteria

2.1 Adjustments are made to spinning machine.

2.2 Spinning machine condition is checked to meet machine operating requirements.

Range may include – travellers, rings, false twist, pneumafil, cots, spindle tapes, spindle brakes, oiling system, spindle divider plates.

2.3 Spinning machine is set to produce yarn to specifications.

Range may include – draft, twist level, twist direction, spindle speed, machine speed, package build, traveller type, traveller size, lappets, false twist speed, spool tension, anti-snarl adjustment, doffing cycle, cyclic variator setting.

2.4 Instrumentation and control devices are set.

Outcome 3

Test run spinning machine to optimise machine settings.

Performance criteria

3.1 Spinning machine is operated.

3.2 Yarn is produced.

3.3 Test samples are taken.

- 3.4 Test results are assessed and machine adjustments made to achieve product specification.

Range count, twist, yarn quality.

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	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

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 the 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.