Title	Set-up a semi-worsted or worsted spinning machine to spin yarn		
Level	3	Credits	10

Purpose	This unit standard is for people working in the semi-worsted or worsted yarn making industry. People credited with this unit standard are able to: demonstrate knowledge of semi-worsted or worsted spinning machine set-up; set up, adjust and maintain a semi-worsted or worsted spinning machine for operation; and keep records.
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Classification	Textiles Manufacture > Top Making, Semi-Worsted and Worsted Processing

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

*Product specifications* refer to the document which accompanies each manufacturing order. This specifies all of the parameters for production of the yarn batch. This may include the fibre specification, the shade, dye bath parameters, machinery to be used and finishing procedures.

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
  All activities and evidence must be in accordance with workplace procedures.
- 4 Recommended skills and knowledge Unit 3129, Card fibre on a semi-worsted or worsted card.

# Outcomes and performance criteria

### **Outcome 1**

Demonstrate knowledge of semi-worsted or worsted spinning machine set-up.

### Performance criteria

1.1 Machine variables that can be changed during set-up are identified and described in terms of the way they affect processing and product quality.

Range draft, ratch, package build, twist level, twist direction, tension, traveller weight, lappet height, spindle speed, spacers.

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

Range Uster evenness, count, twist, strength, spindle speed with stroboscope.

### Outcome 2

Set-up and adjust semi-worsted or worsted spinning machine for operation.

### Performance criteria

2.1 Spinning machine components are checked for operating condition.

Range aprons, drafting rollers, cots, dividers, balloon rings, rings.

- 2.2 Input creel is loaded.
- 2.3 Machine settings are adjusted to produce yarn to specification.

Range draft, ratch, package build, twist level, twist direction, traveller size, lappet height, spindle speed.

- 2.4 Instrumentation and control devices installed in the workplace are set according to workplace procedures.
- 2.5 Test samples are taken.

# **Outcome 3**

Maintain semi-worsted or worsted spinning machine.

# Performance criteria

3.1 Maintenance procedures are carried out.

Range may include – lubrication, aprons, drafting rollers, cots, rings,

spindle tapes, lappet alignment, spindle speed with stroboscope,

balloon rings, dividers, bearings.

### **Outcome 4**

Keep records.

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### Performance criteria

# 4.1 Records are maintained.

Range may include – machine batch settings, production records, maintenance records, machine operating records, quality records.

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Planned review date	31 December 2026

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	3 April 1995	31 December 2019
Revision	2	8 August 1997	31 December 2019
Revision	3	18 July 2000	31 December 2019
Revision	4	10 October 2001	31 December 2019
Revision	5	12 August 2004	31 December 2019
Rollover and Revision	6	25 July 2007	31 December 2019
Rollover	7	21 May 2010	31 December 2019
Review	8	19 May 2016	31 December 2019
Reinstatement	9	24 March 2022	N/A

Consent and Moderation Requirements (CMR) reference 0030	
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This CMR can be accessed at <a href="http://www.nzqa.govt.nz/framework/search/index.do">http://www.nzqa.govt.nz/framework/search/index.do</a>.

# Comments on this unit standard

Please contact Hanga-Aro-Rau Manufacturing, Engineering, and Logistics Workforce Development Council <u>qualifications@hangaarorau.nz</u> if you wish to suggest changes to the content of this unit standard.