

Title	Stock dye fibre		
Level	3	Credits	8

Purpose	People credited with this unit standard are able to: describe stock dyeing; prepare fibre for stock dyeing; prepare and operate a stock dyeing machine; and carry out batch end procedures.
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Classification	Textiles Manufacture > Textile Dyeing and Finishing
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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 Definitions

Dyeing refers to all pre-treatments, dye cycle, and post-treatments carried out in the dyeing machine.

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 5392, *Demonstrate knowledge of textile dyeing and finishing safety*.

Outcomes and performance criteria

Outcome 1

Describe stock dyeing.

Performance criteria

- 1.1 Stock dyeing process steps are described.
- Range load preparation, pre-dyeing treatments, dyeing cycle, post-dyeing treatments, rinsing, unloading, liquor discharge and disposal.
- 1.2 Dyes and chemicals used in the workplace for stock dyeing are described in terms of their nature, function, and safe handling requirements.
- Range dyestuffs, dyeing assistants, auxiliary chemicals.
- 1.3 The function and operation of stock dyeing equipment is described.
- Range dye vessel, circulation system, addition tanks, dye vessel controls, lid sealing mechanism when fitted, safety interlocks, loading device, fibre carrier.

Outcome 2

Prepare fibre for stock dyeing.

Performance criteria

- 2.1 Personal protective equipment is used.
- 2.2 Fibre quantity and type is checked.
- 2.3 Fibre is loaded in carrier with even packing density.

Outcome 3

Prepare and operate a stock dyeing machine.

Performance criteria

- 3.1 Machine is emptied and cleaned to prevent contamination from the previous dyeing.
- 3.2 Machine is prepared and operated in accordance with product specifications.
- Range may include but is not limited to – fibre carrier loaded, vessel filled, chemicals added in specified sequence and circulated, dyestuff added in specified sequence and circulated, dye vessel controls set.
- 3.3 Vessel is operated.
- 3.4 Process conditions are maintained in accordance with product specifications.
- 3.5 Samples are taken.

- 3.6 Dye and chemical additions are carried out in accordance with product specifications.
- 3.7 Records are maintained.

Outcome 4

Carry out batch end procedures.

Performance criteria

- 4.1 Liquor is discharged from machine.
- 4.2 Fibre is removed from machine and handled.
- 4.3 Machine and work area are cleaned to prevent contamination.
- 4.4 Machine faults are reported to supervisor.
- Range faults may include but are not limited to – leaks from pumps, leaks at drains, control malfunctions, lid mechanisms, steam leaks, seal leaks.

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	25 October 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	15 January 2004	31 December 2019
Rollover	6	25 July 2007	31 December 2019
Review	7	17 April 2009	31 December 2019
Review	8	19 May 2016	31 December 2025
Review	9	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.