Title	Demonstrate knowledge of dyeing machinery characteristics and operation		
Level	4	Credits	12

Purpose	People credited with this unit standard are able to: demonstrate knowledge of dyeing machine characteristics; and dyeing machine operation.	
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Classification	Textiles Manufacture > Textile Dyeing and Finishing	
Available grade	Achieved	

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.

Goods-to-dye refers to the product materials to be dyed in a dying 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 refers 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 evidence must be in accordance with workplace procedures.
 - b Competence is intended to be demonstrated using chemicals, processes, and machinery used in the workplace.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of dyeing machine characteristics.

Performance criteria

- 1.1 Batch and continuous dyeing machines are compared in terms of dye application and substrate types.
- 1.2 Goods-to-dye liquor interchange mechanisms are identified and explained.
 - Range goods still and liquor moves, goods move and liquor still, goods and liquor both move by one or more agents.

Outcome 2

Demonstrate knowledge of dyeing machine operation.

Range may include but is not limited to – loose stock, sliver and tow, top, package, hank.

Performance criteria

- 2.1 Dyeing machine operation is mapped in terms of machine operating mechanisms, liquor circulation paths, and substrate loading arrangement.
- 2.2 The dyeing machine is described in terms of function and operation.

Range load preparation and presentation, flow control, process conditions and control of process conditions, goods-to-liquor interchange mechanism, dye selection considerations, dyeing cycle.

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	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		
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 <u>qualifications@hangaarorau.nz</u> if you wish to suggest changes to the content of this unit standard.