

Field Manufacturing

Review of *Manufacturing Skills* and *Textile Manufacture* unit standards

Subfield	Domain	ID
Manufacturing Skills	Apparel and Textile Manufacturing – Workplace Skills	17915
Textiles Manufacture	Core Yarn Processing	4176-4181, 4183-4186, 4188, 4192, 4194, 4195, 5878, 19841, 19855, 22435, 23559, 26002, 29448, 32920, 32921, 32923, 32925
	Textile Dyeing and Finishing	5375-5379, 5382-5384, 5392, 5393, 5414, 29450-29452
	Top Making, Semi-Worsted and Worsted Processing	3129-3132, 3138-3141

Hanga-Aro-Rau has completed the review of the unit standards listed above.

Date new versions published

March 2022

Planned review date

December 2026

Summary

These unit standards were reviewed between March and September 2021 as part of the qualification and programme review for manufacturing qualifications.

This review of unit standards was completed in consultation with stakeholders, particularly users of these unit standards in industry and those holding consent to assess, forming a Technical Advisory Group that was conducted primarily through video meetings and email communication.

Several changes to level and credits of unit standards have been made in this application, to better reflect the skills, knowledge and responsibility required in the reviewed unit standards based on feedback from stakeholders, and in consideration of how these unit standards align with the manufacturing qualifications under which they are now used, rather than the textiles specific qualifications which have been discontinued.

All changes and feedback from the Technical Advisory Group were incorporated into this application, and endorsement was received for submission in September 2021.

Main changes

- Unit standards were moved to the current template.
- Unit standards 5375, 5379 and 19855 have had title adjustments, to reflect adjustments made to the standards and to better reflect these skills and knowledge covered.
- Unit standards 3130, 3032, 3141, 4178 and 4179 were re-instated at industry request. Their levels and credits have been adjusted to reflect the complexity and time required to gain the knowledge and skills.
- Unit standards 5384, 5392, 5393, 29451, 3130, 3132 and 3141 received changes to level, to better reflect the level of skills, knowledge, and responsibility required.
- Unit standards 4176, 5375, 5379, 5384, 5393, 29452, 3132, and 3141 received changes to credits to better reflect the time required to gain the skills and knowledge required.
- Unit standard 32920 replaced unit standards 4180 and 4181.
- Unit standard 32921 replaced unit standards 4183, 4184, and 4185.
- Unit standard 32925 replaced unit standards 4186 and 4187.

- Unit standard 32923 has been developed to meet the industry need and fulfil the gap in skills that existed.

Category C and D unit standards will expire at the end of December 2023

The last date for assessment of superseded versions of Category B unit standards is December 2025

Impact on existing organisations with consent to assess

Current consent for			Consent extended to		
Nature of consent	Classification or ID	Level	Nature of consent	Classification or ID	Level
Standard	4180	3	Standard	32920	3
Standard	4181	3	Standard	32920	3
Standard	4183	4	Standard	32921	4
Standard	4184	4	Standard	32921	4
Standard	4185	4	Standard	32921	4
Standard	4186	2	Standard	32925	2
Standard	4188	2	Standard	32925	2

Detailed list of unit standards – classification, title, level, and credits

All changes are in **bold**.

Key to review category	
A	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
B	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID and a new version number
C	Major changes that necessitate the registration of a replacement standard with a new ID
D	Standard will expire and not be replaced

Manufacturing > Manufacturing Skills > Apparel and Textile Manufacturing – Workplace Skills

ID	Title	Level	Credit	Review Category
17915	Demonstrate knowledge of safe working practices in the apparel and textile industry	2	6	B

Manufacturing > Textiles Manufacture > Core Yarn Processing

ID	Title	Level	Credit	Review Category
4176	Demonstrate knowledge of yarn specification and measurement	4	20 15	B
4177	Demonstrate knowledge of textile fibre blending	4	20	D
4178	Process textile fibres in a blending system	3 2	5	Reinstated
4179	Set up a blending system to process textile fibres	3	10	Reinstated
4180	Hand fettle and clean a textile carding machine	3	5	C
4181	Vacuum fettle a textile carding machine	3	5	C
32920	Fettle a textile carding machine	3	5	New
4183	Clothe a card roller with metallic card clothing	4	8	C
4184	Clothe a card roller with fillet card clothing	4	10	C
4185	Grind card clothing and maintain grinding equipment	4	5	C
32921	Clothe a card roller and grind card clothing	4	10	New

ID	Title	Level	Credit	Review Category
4186	Assembly wind yarn	2	6	C
4188	Twist yarn on a 2 for 1 twisting machine	2	8	C
32925	Twist yarn on a twisting machine	2	8	New
4192	Reel yarn	2	3	D
4194	Wind yarn	2	5	D
4195	Set up a winding machine to wind yarn	3	8	B
5878	Demonstrate knowledge of spun yarns	3	10	B
19841	Demonstrate elementary knowledge of the operations, processes and products of textile manufacturing	2	6	B
19855	Assembly wind yarn Operate a winding machine and wind yarn	2	5	B
22435	Analyse and develop a process map for a textile manufacturing operation, and make recommendations for improvements	5	15	D
23559	Investigate and solve complex problems in apparel or textile manufacturing	5	15	D
26002	Monitor the textile carding process and record remedial actions for identified carding quality problems	3	15	D
29448	Demonstrate knowledge of textile fibres	4	15	D
32923	Set up a twisting machine to twist yarn	3	8	New

Manufacturing > Textiles Manufacture > Textile Dyeing and Finishing

ID	Title	Level	Credit	Review Category
5375	Demonstrate knowledge of textile dyeing and finishing Demonstrate knowledge of textile dyeing	3	25 12	B
5376	Demonstrate textile dye selection and use	5	20	D
5377	Demonstrate knowledge of textile and dyestuff chemistry	5	30	D
5378	Demonstrate knowledge of textile colour	5	20	D
5379	Demonstrate knowledge of dyeing machinery and mechanisms Demonstrate knowledge of dyeing machinery characteristics and operation	4 4	25 12	B
5382	Apply chemicals to a textile sample using laboratory scale equipment	4	20	D
5383	Correct the shade of a textile sample to match a given shade	4	20	D
5384	Prepare a dye recipe from a given shade sample	5 4	40 12	B
5392	Demonstrate knowledge of textile dyeing and finishing safety	2 3	6 6	B
5393	Stock dye fibre	4 3	10 8	B
5414	Perform tests on dyed and finished textile materials	4	15	D
29450	Predict and check shades on textiles	4	20	D
29451	Manage dyehouse operations	5 4	10	B
29452	Measure, dispense and mix dyestuffs and chemicals	3	20 10	B

Manufacturing > Textiles Manufacture > Top Making, Semi-Worsted and Worsted Processing

ID	Title	Level	Credit	Review Category
3129	Card fibre on semi-worsted or worsted card	2	6	B
3130	Set-up and test semi-worsted or worsted card to card fibre	4 3	9	Reinstated
3131	Gill sliver or top on a gilling machine	2	6	B
3132	Set-up a gilling machine to gill sliver or top	4 3	12 9	Reinstated
3138	Process slivers on a roving machine	2	6	B
3139	Set-up roving machine to process slivers	3	6	B
3140	Spin yarn on a semi-worsted or worsted spinning machine	2	9	B
3141	Set up a semi-worsted or worsted spinning machine to spin yarn	4 3	12 10	Reinstated