

Field Manufacturing**Review of *Manufacturing Skills* and *Textiles Manufacture* unit standards**

Subfield	Domain	ID
Manufacturing Skills	Apparel and Textile Manufacturing - Workplace Skills	17914
Textiles Manufacture	Carpet Manufacture	7185-7193, 7195-7225, 7239, 8957, 8958, 16618, 19778, 22437, 22438, 26026-26030, 26306
	Core Yarn Processing	4176-4199, 5470, 5876-5878, 16619, 19841, 19855, 19856, 22432-22436, 22439, 22440, 23559-23561, 25347, 26000-26002, 26005, 26006
	Textile Dyeing and Finishing	2912, 5375-5427
	Top Making, Semi-Worsted and Worsted Processing	3129-3136, 3138-3145, 19853, 22166, 26008, 26356

Competenz has completed the review of the unit standards listed above.

Date new versions published

May 2016

Planned review date

December 2021

Summary

The unit standards were reviewed to align with the recently registered New Zealand Certificates in Manufacturing, Textile Manufacturing, Textile Machine Setting and Textile Dyeing and Finishing and to meet Competenz's ongoing unit standard review schedule.

The review was carried out in consultation with textile manufacturing industry technical experts and some new unit standards were developed. Unit standards that have had very low usage have been set to expire.

The changes were endorsed by industry technical groups.

Main changes

- Changes were made to outcome statements, evidence requirements, and range statements to clarify assessment requirements, ensure alignment with current industry requirements, and to correct grammatical errors.
- Explanatory notes and evidence requirements were updated and practical standards were updated to use standardised reference to the term *workplace procedures* to replace *operating procedures*, *company procedures*, and *enterprise procedures*.
- Seven unit standards were replaced by four new unit standards.
- 124 unit standards were designated as expiring without replacement.
- The level of three unit standards was adjusted to provide a better match with the level

descriptors.

- The credits for seven unit standards were adjusted to better reflect the time required for learning and assessment.

The last date for assessment of superseded versions of these standards is 31 December 2019. Results will not be accepted where the assessment date is after the last date for assessment of the superseded version of the standard.

Category C and D unit standards will expire at the end of December 2019

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
Subfield	Textiles Manufacture	4-5	Standard	29368	4
Domain	Apparel and Textile Manufacturing - Workplace Skills	2	Standard	29367	2
Standard	5380	5	Standard	29451	5
Standards	5876, 5877	3	Standard	29448	4

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

ID	Domain	Title	Level	Credit	Review Category
17914	Apparel and Textile Manufacturing - Workplace Skills	Demonstrate knowledge of workplace practice in the apparel or textile industry	2	5	D
<i>Recommended alternative</i> 29367	<i>Manufacturing Processes</i>	<i>Demonstrate employment and interrelationship foundation skills in a manufacturing operation</i>	2	5	

Manufacturing > Textiles Manufacture

Manufacturing > Manufacturing Skills

ID	Domain	Title	Level	Credit	Review Category
26001	Core Yarn Processing	Set up and monitor a continuous heat setting line	4	24	D
<i>Recommended alternative</i>					
29368	<i>Manufacturing Processes</i>	<i>Set up, control and monitor equipment to meet production requirements in a manufacturing operation</i>	4	20	

Manufacturing > Textiles Manufacture > Carpet Manufacture

ID	Title	Level	Credit	Review Category
7185	Handle and store yarns	3	12	D
7186	Handle and move materials in a carpet manufacturing plant	2	4	B
7187	Prepare and break down a carpet tufting or beaming creel	2	10	B
7188	Load beams with pile yarn or warp yarn	3	12	B
7189	Adjust carpet tufter to produce carpet of specified pile weight	4	10	B
7190	Tuft plain carpet	3	20	B
7191	Tuft multi-level cut and/or loop pile carpet	4	5	B
7192	Tuft carpet on a graphics tufter	4	10	B
7193	Tuft carpet on an enhanced graphics tufter	4	15	D
7195	Tune and maintain multi-height carpet tufters for operation	5	15	D
7196	Tune enhanced graphics carpet tufters for operation	5	15	D
7197	Inspect and mend plain unbacked tufted carpet	3	20	B
7198	Inspect and mend patterned unbacked tufted carpet	4	10	B
7199	Shear carpet	3	20	D
7200	Set up and maintain a carpet shearing machine	5	10	D
7201	Perform quality tests on unbacked tufted carpet	3	8	B
7202	Prepare carpet backing latex for use	4	12	D
7203	Process tufted carpet on a backing line	4	25	D
7204	Identify faults and grade finished tufted carpet	5	25	D
7205	Set spools for spool axminster carpet weaving	3	16	D
7206	Thread spools for spool axminster carpet weaving	2	8	D
7207	Prepare jacquard cards for carpet manufacture	2	12	D
7208	Weave carpet on a spool axminster carpet weaving machine	3	20	D
7209	Tune and maintain a spool axminster carpet weaving machine	4	50	D

ID	Title	Level	Credit	Review Category
7210	Manage a gripper axminster carpet creel and monitor weaving	3	16	D
7211	Weave carpet on a gripper axminster carpet weaving machine	4	10	D
7212	Tune and maintain a gripper axminster carpet weaving machine	4	50	D
7213	Manage a wilton carpet creel and monitor weaving	3	16	D
7214	Weave carpet on a wilton carpet weaving machine	4	10	D
7215	Tune and maintain a wilton carpet weaving machine	4	50	D
7216	Brush and beat woven carpet	2	4	D
7217	Identify and mend faults in woven carpet	3	24	D
7218	Backsize woven carpet	2	4	D
7219	Identify faults in finished woven carpet	3	20	D
7220	Perform quality tests on backed and unbacked woven carpet	3	16	D
7221	Roll and wrap carpet	2	4	B
7222	Store carpet in a carpet warehouse	3	8	D
7223	Prepare carpet sales samples	2	12	B
7224	Prepare peg board carpet samples by hand	2	8	D
7225	Maintain production carpet yarn reference and sample library	3	8	D
7239	Perform quality tests on backed and finished tufted carpet	3	8	B
8957	Demonstrate advanced knowledge of carpets and carpet manufacture	5	25	D
8958	Demonstrate elementary knowledge of carpet manufacture	2	8	D
16618	Demonstrate knowledge of carpet properties and performance in use	5	20	D
19778	Manage carpet on a roll up system	4	8	D
22437	Demonstrate advanced knowledge of carpet manufacturing technologies	5	35	D
22438	Demonstrate knowledge of carpet finishing	5	18	D
26026	Demonstrate knowledge of and carry out maintenance of a yarn splicing machine	5	10	D
26027	Review the capability of carpet tufting machines and select and set up a tufting machine to run a product trial	5	10	D
26028	Prepare for and carry out long period maintenance of a carpet tufting machine	5	10	D
26029	Develop and manage preventative maintenance schedules for carpet tufting machinery	5	10	D
26030	Prepare for and carry out short period maintenance of a carpet tufting machine and change the configuration	5	10	D

ID	Title	Level	Credit	Review Category
26306	Prepare and splice yarn on a plain level-loop and level-cut pile tufter	2	8	D

Manufacturing > Textiles Manufacture > Core Yarn Processing

ID	Title	Level	Credit	Review Category
4176	Demonstrate knowledge of yarn specification and measurement	4	20	B
4177	Demonstrate knowledge of textile fibre blending	4	15	B
4178	Process textile fibres in a blending system	3	5	D
4179	Set up a blending system to process textile fibres	3	10	D
4180	Hand fettle and clean a textile carding machine	3	5	B
4181	Vacuum fettle a textile carding machine	3	5	B
4182	Demonstrate knowledge of card clothing and grinding	3	10	D
4183	Clothe a card roller with metallic card clothing	4	8	B
4184	Clothe a card roller with fillet card clothing	4	10	B
4185	Grind card clothing and maintain grinding equipment	4	5	B
4186	Twist yarn on a ring twisting machine	2	6	B
4187	Set up a ring twisting machine to twist yarn	3	6	D
4188	Twist yarn on a 2 for 1 twisting machine	2	8	B
4189	Set up a 2 for 1 twisting machine to twist yarn	3	8	D
4190	Twist fancy yarn on a hollow spindle twisting machine	2	8	D
4191	Set up a hollow spindle twisting machine to twist fancy yarn	3	8	D
4192	Reel yarn	2	3	B
4193	Set up a reeling machine to reel yarn	3	4	D
4194	Wind yarn	2	5	B
4195	Set up a winding machine to wind yarn	3	8	B
4196	Maintain a winding machine	5	60	D
4197	Set up an autoclave and process yarn	3	5	D
4198	Spin yarn on a wrap spinning machine	2	9	D
4199	Set up a wrap spinning machine to spin yarn	4	12	D
5470	Perform tests on finished or partly processed yarn	3	18	D
5876	Demonstrate knowledge of natural textile fibres	3	10	C
5877	Demonstrate knowledge of manufactured textile fibres	3	10	C
29448	Demonstrate knowledge of textile fibres	4	15	
5878	Demonstrate knowledge of spun yarns	3	10	B
16619	Demonstrate knowledge of wool measurement and marketing systems	4	20	D
19841	Demonstrate elementary knowledge of the operations, processes and products of textile manufacturing	2	6	B
19855	Assembly wind yarn	2	5	B

ID	Title	Level	Credit	Review Category
19856	Set up an assembly winding machine to wind yarn	3	8	D
22432	Develop an apparel or textile product, and end use specification	5	25	D
22433	Plan apparel or textile machinery maintenance activities using project management techniques	5	25	D
22434	Demonstrate knowledge of recent technology developments in the apparel or textile industry	5	15	D
22435	Analyse and develop a process map for a textile manufacturing operation, and make recommendations for improvements	5	15	B
22436	Plan and control production in a textile manufacturing organisation	5	21	D
22439	Plan the implementation of advanced apparel or textile processing technology	5	20	D
22440	Apply mathematics and mechanics calculations to textile manufacturing	3	10	D
23559	Investigate and solve complex problems in apparel or textile manufacturing	5	15	B
23560	Demonstrate knowledge of production scheduling and process monitoring in the apparel or textile industry	5	15	D
23561	Design and compile a quality specification for an apparel or textile product	5	10	D
25347	Prepare and operate an air-entangling or air-twisting machine to wind yarn	3	8	D
26000	Process yarn in a continuous heat setting line	3	12	D
26002	Monitor the textile carding process and record remedial actions for identified carding quality problems	3	15	B
26005	Develop, implement and review a maintenance plan for a carding machine	5	30	D
26006	Investigate, diagnose and rectify carding problems that impact on product quality or process efficiency	5	15	D

Manufacturing > Textiles Manufacture > Textile Dyeing and Finishing

ID	Title	Level	Credit	Review Category
2912	Scour fabric	3	9	D
5375	Demonstrate knowledge of textile dyeing and finishing	3	16 25	B
5376	Demonstrate knowledge of textile dye selection and use Demonstrate textile dye selection and use	5	25 20	B
5377	Demonstrate knowledge of textile and dyestuff chemistry	5	40 30	B
5378	Demonstrate knowledge of textile colour	5	25 20	B

ID	Title	Level	Credit	Review Category
5379	Demonstrate knowledge of dyeing machinery and mechanisms	4	25	B
5380 29451	Demonstrate knowledge of dyehouse operation Manage dyehouse operations	5 5	40 10	C
5381	Demonstrate knowledge of textile printing	4	25	D
5382	Apply chemicals to a textile sample using laboratory scale equipment	3 4	20	B
5383	Correct the shade of a textile sample to match a given shade	4	25 20	B
5384	Prepare a dye recipe from a given shade sample	5	40	B
5385	Carry out visual shade checks on textiles	3	9	C
5387 29450	Predict shades and/or shade corrections using a computerised colour measurement system Predict and check shades on textiles	3 4	4 20	C
5386	Measure shade of a textile material using a computerised colour measurement system	2	2	D
5388	Control a computerised colour measurement system	3	10	D
5389	Handle and store dyestuffs and chemicals	2	3	D
5390	Measure and dispense dyestuffs and chemicals	3	18	C
5391 29452	Mix dyestuffs and chemicals for use Measure, dispense and mix dyestuffs and chemicals	3 3	18 20	C
5392	Demonstrate knowledge of textile dyeing and finishing safety	2	6	B
5393	Stock dye fibre	3 4	9 10	B
5394	Dye tops	3	9	D
5395	Hank dye yarn	3	12	D
5396	Dye yarn in packages	3	12	D
5397	Prepare fabric for dyeing in a winch, jet, or jig dyeing machine	2	6	D
5398	Dye fabric in a winch dyeing machine	3	9	D
5399	Dye fabric in a jig dyeing machine	3	12	D
5400	Dye fabric in a jet dyeing machine	3	12	D
5401	Dye fabric in a beam dyeing machine	3	12	D
5402	Dye textile materials in a rotating drum dyeing machine	3	9	D
5403	Dye textile materials in a paddle dyeing machine	3	9	D
5404	Produce multi-colour yarn	3	12	D
5405	Dry loose fibre in a conveyor dryer or drum dryer	2	3	D
5406	Dry yarn hanks in a conveyor dryer or drum dryer	2	9	D
5407	Dry fabric using a conveyor dryer or a drum dryer	2	3	D
5408	Dry textile materials using a radio frequency dryer	2	6	D
5409	Dry knitted fabric in a tensionless dryer	2	6	D

ID	Title	Level	Credit	Review Category
5410	Dry textile materials in a rotating drum dryer	2	2	D
5411	Steam and press socks on boards or formers	2	4	D
5412	Steam and press stockings and tights on boards or formers	2	7	D
5413	Inspect knitted fabric after dyeing, printing, or finishing	3	9	D
5414	Perform tests on dyed and finished textile materials	3 4	18 15	B
5415	Prepare a screen for textile printing	3	18	D
5416	Print fabric on a flat bed screen printing machine	3	12	D
5417	Print fabric on a rotary screen printing machine	3	12	D
5418	Process fabric on a continuous water extraction and slitting machine	2	9	D
5419	Process fabric on a slitting machine	2	6	D
5420	Print garments using a carousel printing machine	3	12	D
5421	Prepare carpet substrate for printing	2	6	D
5422	Apply dyestuff and/or chemicals to textile substrates with a pad	2	6	D
5423	Apply dyestuff and/or chemicals to carpet with a jet dye applicator	3	25	D
5424	Set-up a jet dye applicator for carpet printing	3	18	D
5425	Apply dyestuff and/or chemicals to carpet with a foam dye applicator	3	18	D
5426	Dry carpet on a carpet dryer	2	6	D
5427	Inspect carpet after dyeing or printing	3	18	D

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

ID	Title	Level	Credit	Review Category
3129	Card fibre on a semi-worsted or worsted card	2	6	B
3130	Set-up semi-worsted or worsted card to card fibre	4	9	D
3131	Gill sliver or top on a gilling machine	2	6	B
3132	Set-up a gilling machine to gill sliver or top	4	12	D
3133	Comb top on a combing machine	2	6	D
3134	Set-up a combing machine to comb top	4	12	D
3135	Process sliver or top in a backwash	3	6	D
3136	Test sliver and top	3	6	D
3138	Process slivers on a roving machine	2	6	B
3139	Set-up roving machine to process slivers	3	6	D
3140	Spin yarn on a semi-worsted or worsted spinning machine	2	9	D
3141	Set-up a semi-worsted or worsted spinning machine to spin yarn	4	12	D
3142	Set-up and process yarn on a continuous steaming machine	3	6	D
3143	Process yarn on a brushing machine	2	3	D
3144	Process yarn on a balling machine	2	6	D

ID	Title	Level	Credit	Review Category
3145	Set-up a balling machine to process yarn	3	6	D
19853	Maintain a semi-worsted or worsted ring spinning machine	5	60	D
22166	Demonstrate knowledge of semi-worsted and worsted yarn making technology	5	20	D
26008	Diagnose and rectify machine or component faults on a semi-worsted card	5	35	D
26356	Configure and set up a semi-worsted card	5	25	D