# 40092 Generate machine specifications for an advanced textiles project

Kaupae   Level	4
Whiwhinga   Credit	15
Whāinga   Purpose	This skill standard is intended for people who want to learn how to identify key information from project documentation to generate specifications and settings for machinery and equipment used in a large or complex advanced textiles project.
	This skill standard can be used in programmes leading to the New Zealand Certificate in Advanced Textiles (Level 4) with strands in Industrial Textiles Fabrication, and Industrial Trimming [Ref: 5060].

# Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako   Learning outcomes		Paearu aromatawai   Assessment criteria	
1.	Interpret project documentation for a large or complex advanced textiles project.	Interpret drawings and other project documentation to select machinery and materials.	
		b. Confirm that the interpretation of the project drawings and documentation matches the product requirements.	
2.	Select machinery, equipment or tools required to complete a large or complex advanced textiles project.	Select appropriate cutting machinery, equipment or tools with reference to the project requirements.	
		b. Select appropriate sewing machinery with reference to the project requirements.	
		c. Select appropriate welding machinery with reference to the project requirements.	
3.	Prepare tools or cutting equipment to complete a large or complex advanced textiles project.	Select the types of tools and determine any settings required for cutting equipment with reference to the project requirements.	
		b. Prepare tools or cutting equipment in accordance with project requirements.	
		c. Confirm tools or cutting equipment are functioning correctly and properly maintained.	

Hua o te ako   Learning outcomes		Paearu aromatawai   Assessment criteria		
4.	Determine settings for sewing machines required to complete a large or complex advanced textiles project.	Determine the settings required for a sewing machine in terms of the project requirements.		
		b. Confirm sewing machines are functioning correctly and properly maintained.		
5.	Document machine specifications for a large or complex advanced textiles project.	Record machine settings in project documentation.		

# Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

#### Assessment specifications:

The evidence presented for assessment against this skill standard must be consistent with safe working practices and be in accordance with applicable workplace requirements, industry guidelines, legislative requirements, and manufacturer's information.

Evidence must be provided of machine selection and specifications for at least 3 large or complex projects. These projects cannot be identical. Across the 3 projects there must be 2 different machine types and 2 different product types.

When used in the fabrication strand, examples of projects that may be used include (but are not limited to) manufacture or repair of: tarpaulins, tents and marquees, screens and blinds, awnings, shade sails, canopy structures, tension membrane skins and textile structures.

When used in the trimming strand, examples of projects that may be used include (but are not limited to) manufacture or repair of: vehicle and marine upholstery, boat covers, convertible tops, tonneau covers, protective covers, clear enclosures, and carpets.

#### **Definitions**

Complex projects – projects that have a level of complexity in their production, e.g. multiple materials to be sourced, advanced technical skills required, coordination of other agencies or contractors, multiple components or parts to the product.

*Industry guidelines* – those practices and procedures commonly used as standard procedures to produce items of acceptable saleable quality in the industrial textile fabrication and trimming industry such as related textbook descriptors.

*Large projects* – projects that have additional production requirements due to their size or volume, e.g. high quantity of material, high labour needs, large production area.

*Manufacturer's information* – technical information for a machine or product detailing operation; installation and servicing procedures; manufacturer instructions; technical terms and descriptions; and detailed illustrations.

*Workplace requirements* – instructions to staff on policy and procedures that are available in the workplace. These requirements may include – company policies and procedures, work instructions, product quality specifications and legislative requirements.

# Ngā momo whiwhinga | Grades available

Achieved.

# Ihirangi waitohu | Indicative content

- Types of projects such as manufacture and repair of awnings, screens and blinds, shade sails, canopy structures and tension membrane skins, tents and marguees.
- Computer aided design (CAD) such as plotting tables, vacuum tables, plotting software: nesting, single drawing.
- Parameters for jobs such as use case, materials required, fabrication processes: cutting, sewing, welding.
- Tools such as
  - o eyelet press manual, foot operated, air operated tools.
  - o hand tools
- Cutting equipment: knife, hot knife, shears, foam cutter, rotary cutter.
- Needle set up such as single needle, twin needle, overlocker, zig zag.
- Machine set up such as older style machines with adjustable dial type settings and programmed machines with a preset range of settings.
- Testing and maintenance tasks and how these are scheduled including the frequency of different types of tasks and why they are important.
- Procedures for documenting information about machine settings and maintenance.
- Workplace procedures for ensuring the electrical test and tag requirements for machines are met and why this is important.

#### Rauemi | Resources

Legislation, regulations and/or industry standards relevant to this skill standard include but are not limited to:

Health and Safety at Work Act 2015.

Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this skill standard will take precedence for assessment purposes, pending review of this skill standard.

Legislation can be accessed at: <a href="https://www.legislation.govt.nz">https://www.legislation.govt.nz</a>.

#### Pārongo Whakaū Kounga | Quality assurance information

Ngā rōpū whakatau-paerewa   Standard Setting Body	Hanga-Aro-Rau Engineering, Manufacturing and Logistics Workforce Development Council
Whakaritenga Rārangi Paetae Aromatawai   DASS classification	Manufacturing > Industrial Textile Fabrication > Industrial Textile Fabrication and Trimming
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga   CMR	0014

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Hātepe   Process	Putanga   Version	Rā whakaputa   Review Date	Rā whakamutunga mō te aromatawai   Last date for assessment	
Rēhitatanga   Registration	1	29 August 2024	N/A	
Kōrero whakakapinga   Replacement information	N/A			
Rā arotake   Planned review date	31 December 2029			

Please contact Hanga-Aro-Rau Engineering, Manufacturing and Logistics Workforce Development Council at <a href="mailto:qualifications@hangaarorau.nz">qualifications@hangaarorau.nz</a> if you wish to suggest changes to this skill standard.