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40018

Set up and maintain sewing machines used in an industrial textile fabrication or trimming workplace

Kaupae Level	3
Whiwhinga Credit	6
Whāinga Purpose	This skill standard is intended for people who want to learn how to correctly set up, safely operate and maintain sewing machines used in an industrial textile fabrication or trimming workplace. This skill standard may be used in programmes leading to qualifications and micro-credentials at Level 3 and above in an industrial textile fabrication discipline.

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

Hua o 1ea ko Learning outcomes	Paearu aromatawai Assessment criteria		
Describe types of sewing machines and stitching used in an industrial textile	a. Describe the types of sewing machines used.		
fabrication or trimming workplace.	b. Describe the operation, component parts, and adjustment points of a sewing machine.		
	c. Identify the machine attachments used in fabrication or trimming jobs and explain their purpose.		
	d. Describe the types of stitching used in fabrication or trimming jobs.		
	e. Describe common stitching faults, their causes and how to correct them.		
	f. Describe the safety procedures to be followed before and during the operation of a sewing machine.		
	g. Describe how to set up a sewing machine, including the threading and needle set up process, and setting adjustment process.		

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	h. Describe the adjustments required to set up a sewing machine for optimum operation, including correct needle and thread size, stitch length, tension, and foot pressure.	
Set up a sewing machine used for an industrial textile fabrication or trimming job.	. Explain the consequences of the machine not operating at optimum level.	
	b. Set up a sewing machine, including threading and needle set up, fitting appropriate machine attachments and adjusting as appropriate for the job.	
	c. Carry out a test on a sewing machine for correct operation and identify and rectify any stitching faults.	
Carry out maintenance on a sewing machine used for industrial textile fabrication or trimming job.	Explain the importance of cleaning and carrying out regular maintenance on sewing machines.	
	b. Clean and perform regular maintenance on a sewing machine.	
	c. Test the machine operation after maintenance.	

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 should relate to machines used in the learner's workplace.

Evidence must be provided of:

Three setups of a sewing machine – including two different materials, one attachment change and two adjustment changes.

Identifying and rectifying two separate stitching faults.

Carrying out regular maintenance on a sewing machine on two separate occasions.

Definitions

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.

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.

Sewing machines – those sewing machines that are commonly found in commercial operations and are typically lockstitch industrial machines.

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

- Sewing machines, such as walking foot, compound feed, twin needle, overlocker.
- Component and adjustment parts, such as cylinder arm, flat bed, foot heights, stitch length, tensions, timing, motor speed, electronic settings.
- Machine attachments, such as automatic folder, automatic binder, feet, seam and hem guides, lighting, lubrication and needle cooling devices, pullers.
- Types of stitching, such as straight, zigzag, twin needle, computerised, overlocking.
- Stitching faults, such as crooked stitching, badly aligned seams, puckered seams, skipped stitches, poor tension, frayed or broken thread, damaged fabric or material.
- Sewing machine set up and adjustment, such as stitch length, tension, foot heights, stitch length, timing and tensions.
- Regular maintenance, such as cleaning, lubricating, adjusting, hook timing.

Rauemi | Resources

Legislation, regulations and/or industry standards

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: https://www.legislation.govt.nz.

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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 and Trimming > Industrial Textile Fabrication Core Skills	
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0014	

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	30 May 2024	N/A
Kōrero whakakapinga Replacement information	This skill standard replaces unit standards 23489 and 23490.		
Rā arotake Planned review date	31 December 2029		

Please contact Hanga-Aro-Rau Engineering, Manufacturing and Logistics Workforce Development Council at qualifications@hangaarorau.nz if you wish to suggest changes to this skill standard.