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# 40027

# Perform elementary fabric welding work 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 about welding processes used in industrial textile fabrication or trimming workplace, and how to perform elementary fabric welding work 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 te ako   Learning outcomes	Paearu aromatawai   Assessment criteria		
Describe fabric welding processes used in an industrial textile fabrication or trimming workplace.	Describe the types of fabric welding processes used, and describe the features of each process.		
	b. Describe barrier material use and characteristics for high frequency (HF) welding.		
	c. Describe the components that must be kept in balance to achieve a structurally sound weld.		
	d. Describe the characteristics of good fabric welding.		
	e. Identify common welding faults.		
	f. Identify the types of tests used to determine fabric weld quality.		
	g. Describe the safety precautions to follow when working with fabric welding tools and equipment.		
	h. Describe the hazards associated with fabric welding processes.		

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Prepare for and perform elementary fabric welding for industrial textile fabrication or trimming job.	Select welder and welding aids for an elementary fabric welding job.
i acinocatori or aminimigijos.	b. Inspect welder for safety.
	c. Select material and set up welder to suit material.
	d. Weld a sample of material, carry out appropriate quality test, and make adjustments to welder as required.
	e. Prepare material and perform weld.

#### 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 from an industrial textile fabrication or trimming workplace of three separate elementary fabric welding jobs. These are jobs that can be accomplished with basic welding knowledge and skills and will be familiar to the learner.

#### **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.

Material(s) – fabric, fittings and any other components used in the manufacture of industrial textile fabrication and trimming products.

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

Achieved.

#### Ihirangi waitohu | Indicative content

#### Welding essential knowledge

- Types of fabric welding processes, such as high frequency (HF), hot air, hot wedge, ultrasonic.
- Components of a structurally sound weld, such as heat, pressure and speed.
- Characteristics of good welding, such as strength, penetration, even and flat, melt line, appearance.

 Common welding faults, such as lack of penetration, distortion, oozing, beading blow, delamination, tape alignment, surface flash, consistency of welded joint.

- Weld quality tests, such as peel, shear, pressure, tensile strength, water, air test.
- Hazards, such as radiation exposure, radiation burns, burns, fumes, and electrocution.

## **Fabric welding**

- Weldable fabrics, such as polyvinyl chloride (PVC), polyethylene (PE), polyfabrics, synthetics, vinyl.
- Welder and welding aids, such as bars, fabric guides, barrier material, welding dies, tapes, weights, rollers, nozzles, wedges.
- Set up factors, such as pressure, power, welding time, dwell time, width of weld, temperature, speed, airflow, pressure, atmospheric conditions.

## 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: <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 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 replaced unit standards 23499, 23500, 23501, 23502.			
Rā arotake   Planned review date	31 December 2029			

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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.