Title	Hard face automotive components using an electric or oxyacetylene welding process		
Level	4	Credits	2

Purpose	This unit standard is intended for people in the automotive repair industry.
	People credited with this unit standard are able to hard face automotive components using an electric or oxyacetylene welding process.

Classification	Motor Industry > Automotive Workshop Engineering

Available grade	Achieved
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#### **Guidance Information**

- 1 It is recommended that people hold credit for Unit 24374, Demonstrate knowledge of hard facing automotive components before being assessed against this unit standard.
- 2 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable service information, and company requirements and legislative requirements. This includes the knowledge and use of suitable tools and equipment.
- Performance of the outcomes of this unit standard must comply with the following: Health and Safety at Work Act 2015:

Land Transport Rule: Heavy Vehicles 2004; Land Transport Rule: Vehicle Repair 1998.

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

Company requirements refer to 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.

Service information refers to technical information for a vehicle, machine, or product detailing operation; installation and servicing procedures; manufacturer instructions; technical terms and descriptions; and detailed illustrations.

Suitable tools and equipment refer to industry approved tools and equipment that are recognised within the industry as being the most suited to complete the task in a professional and competent manner with due regard to safe working practices.

6 Range

Evidence is required of hard facing a minimum of two automotive components.

# Outcomes and performance criteria

#### **Outcome 1**

Hard face automotive components using an electric or oxyacetylene welding process.

### Performance criteria

1.1 The welding equipment is prepared.

Range selection of electrode or hardfacing rod, adjustment of the

equipment, welding pattern, full penetration, appearance of the

weld.

1.2 The component surface is rebuilt and prepared to ensure a sound basis for hardfacing.

Range component surface preparation, cleanliness, welding pattern, full

penetration, appearance of the weld.

1.3 Hardfacing is applied to the component.

Range adjustment of the equipment, selection of electrode or hard facing

rod, penetration, pattern of beads, overlap, minimum heat input,

component cooling, appearance of finished weld.

1.4 The welding equipment is stored in a safe and tidy manner after use.

Replacement information	This unit standard and unit standard 24374 replaced unit standard 2310 and unit standard 3395.
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Planned review date	31 December 2025
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Status information and last date for assessment for superseded versions

Process	Version	Date Last Date for Assessmen	
Registration	1	20 March 2008	31 December 2022
Review	2	29 April 2021	N/A

Consent and Moderation Requirements (CMR) reference	0014
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This CMR can be accessed at <a href="http://www.nzqa.govt.nz/framework/search/index.do">http://www.nzqa.govt.nz/framework/search/index.do</a>.

## Comments on this unit standard

Please contact MITO New Zealand Incorporated <a href="mailto:info@mito.org.nz">info@mito.org.nz</a> if you wish to suggest changes to the content of this unit standard.