

<b>Title</b>	<b>Use a gas metal arc welding plant in the automotive and related industries</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>3</b>

<b>Purpose</b>	People credited with this unit standard are able to use a gas metal arc welding (GMAW) plant in the automotive and related industries.
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<b>Classification</b>	Motor Industry > Automotive Workshop Engineering
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 It is recommended that people hold credit for Unit 30570, *Demonstrate knowledge of welding in the motor industry*, before being assessed against this unit standard.
- 2 Evidence presented for assessment against this unit standard must be consistent with safe work 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.
- 3 Legislation, regulations and/or industry standards relevant to this unit standard may include:
  - Health and Safety at Work Act 2015;
  - Land Transport Rule: Vehicle Repair 1998, Rule 34001;
 and any subsequent amendments and replacements.
- 4 **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 information such as 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 work practices.
- 5 **Range**  
 Assessment against this unit standard applies to welding steel in the overhead, vertical up and down, and horizontal positions.

## 6 Assessment

For the automotive body industry, it is recommended that this unit standard is assessed against by an industry assessment such as [I-Car Automotive Steel GMA \(MIG\) Welding Qualification Assessment \(WCS03\)](#).

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## Outcomes and performance criteria

### Outcome 1

Use a gas metal arc welding (GMAW) plant in the automotive and related industries.

Range butt, open butt, tack, fillet, lap, plug.

### Performance criteria

1.1 GMA welder is set up.

Range gas flow, wire tension, wire speed, voltage, earth lead.

1.2 Metal is prepared for welding.

Range may include – no contaminants on the surface to be welded, abutting ends square, suitable gap between joint edges, metal positioned securely, holes drilled for plug welding, anti-corrosion primer.

1.3 Heat shielding of adjacent vehicles, tools, and machine components is carried out.

1.4 The metal is welded in position.

Range no undercutting, no sign of porosity, full penetration, consistent width and height, neat appearance, maximum of 3mm distortion.

1.5 Welding equipment is shut down and maintained after use and put away, ensuring there is no damage to equipment or electronics.

Range gas shut off, power leads disconnected, equipment secure and tidy, plant stored correctly, general maintenance.

<b>Replacement information</b>	This unit standard replaced unit standard 914 and unit standard 5771.
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<b>Planned review date</b>	31 December 2026
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**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	26 November 2007	31 December 2018
Review	2	21 April 2016	31 December 2023
Review	3	24 March 2022	N/A

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

**Comments on this unit standard**

Please contact Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council [qualifications@hangaarorau.nz](mailto:qualifications@hangaarorau.nz) if you wish to suggest changes to the content of this unit standard.