

<b>Title</b>	<b>Install, commission, and maintain electronic gas flow correctors</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>6</b>

<b>Purpose</b>	People credited with this unit standard are able to: demonstrate knowledge of documentation, company procedures, hazards, and equipment to install, commission, and maintain electronic gas flow correctors; prepare, install, and commission an electronic gas flow corrector; maintain an electronic gas flow corrector; and complete reporting and documentation.
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<b>Classification</b>	Gas Industry > Gas Measurement
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 This unit standard is intended for, but is not limited to, workplace assessment. The range statements relate to enterprise specific equipment, procedures, and processes.
- 2 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable manufacturer's specifications, company procedures 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 include but are not limited to the current version of the:
  - Health and Safety at Work Act 2015;
  - Resource Management Act 1991;
  - Excavation Safety good practice guidelines ISBN 978-0-908336-49-4 (online);
  - AS/NZS 4645.1:2018 *Gas distribution networks – Network management*;
  - AS/NZS 4645.2:2018 *Gas distribution networks – Steel pipe systems*;
  - AS/NZS 4645.3:2018 *Gas distribution networks – Plastics pipe systems*;
  - AS 2885.1-2018 *Pipelines – Gas and liquid petroleum Design and construction*;
  - AS 2885.3-2018 *Pipelines – Gas and liquid petroleum Operation and maintenance*;
  - NZS 5259:2015 *Gas measurement*;
 and any subsequent amendments and replacements.
- 4 References
  - Australian standards (AS) may be found at [www.standards.org.au](http://www.standards.org.au);
  - Australian/New Zealand standards (AS/NZS) may be found at [www.standards.govt.nz](http://www.standards.govt.nz);
  - New Zealand standards (NZS) may be found at [www.standards.govt.nz](http://www.standards.govt.nz).

- 5 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.
- 6 Definitions  
*Company procedures* mean the documented methods for performing work activities, and include health and safety, operational, environmental, and quality management requirements. They may refer to legislation, regulations, guidelines, standard operating procedures, manuals, codes of practice, or policy statements.  
*SCADA* refers to a System Control and Data Acquisition system.

## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of documentation, company procedures, hazards, and equipment to install, commission, and maintain electronic gas flow correctors.

### Performance criteria

- 1.1 Documentation and company procedures to install, commission, and maintain electronic gas flow correctors are located and interpreted.
- Range may include – network standard, equipment operating manuals, maintenance procedures, standard operating procedure, safe work procedure, work instruction, job hazard analysis, job risk assessment.
- 1.2 Documentation and instructions for a specified job are obtained.
- Range may include – permit, job card, maintenance history, location drawing, corrector operating parameters, test labels and certificates, hazard identification, site liaison, authorisation.
- 1.3 Potential safety hazards and controls are described.
- Range hazards may include – gas release, stray voltage, electricity, personal injury, public, vehicles;  
 controls may include – gas detection, isolation, earthing, personal protective equipment, safe access and egress, temporary traffic control, signage, barriers.
- 1.4 Corrector installation and maintenance equipment are described.
- Range equipment may include – power source, tubing, fittings, gaskets, test equipment and cables, reference gauges, computer.
- 1.5 Potential faults associated with the incorrect application and operation of equipment, and the steps to avoid them are described.

## Outcome 2

Prepare, install, and commission an electronic gas flow corrector.

### Performance criteria

2.1 Safety and environmental hazards are identified and controlled.

Range hazards may include – gas release, stray voltage, electricity, personal injury, public, vehicles;  
controls may include – signage, barriers, personal protective equipment, safe access and egress, temporary traffic control, gas detection, isolation, earthing.

2.2 Electronic gas flow corrector and fittings are prepared, handled, and positioned.

Range storage, transport, correct location (multiple meters), drive plate orientation, seals, temperature and pressure measuring points, SCADA connection, earth connection.

2.3 Corrector's parameters are checked.

Range may include – fixed factor, scale factors, clock settings, battery voltage, wakeup times, alarms, site, customer, altitude, drive rate.

2.4 Corrector is installed and commissioned.

Range leak detection, pulse, pressure setting, temperature setting, alarms, wriggler meshing, time, date, download, remote communication.

## Outcome 3

Maintain an electronic gas flow corrector.

### Performance criteria

3.1 Electronic gas flow corrector is inspected.

Range may include – integrity, water ingress, readability, corrosion, pests, seals, alarms.

3.2 Integrity checks on electronic gas flow corrector are carried out.

Range may include – base volume index, reference pressure, reference temperature, download, readings, electronic correction factor, manual correction factor, battery condition and voltage, pulse input scale factors, drive rate.

3.3 Replacement components or component parts of electronic gas flow correctors are installed and checked.

**Outcome 4**

Complete reporting and documentation.

**Performance criteria**

4.1 Records and documents are completed and processed, and information is communicated to internal and external parties as required.

Range may include – readings, downloaded data, special conditions, completion notice, additional work.

<b>Planned review date</b>	31 December 2025
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**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	25 September 1997	31 December 2018
Revision	2	3 August 2000	31 December 2018
Review	3	22 October 2002	31 December 2018
Review	4	20 November 2006	31 December 2020
Review	5	17 August 2017	31 December 2023
Revision	6	30 August 2018	31 December 2023
Review	7	27 May 2021	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 MITO New Zealand Incorporated [info@mito.org.nz](mailto:info@mito.org.nz) if you wish to suggest changes to the content of this unit standard.