

Title	Maintain a conductivity measuring system		
Level	4	Credits	4

Purpose	People credited with this unit standard are able to: <ul style="list-style-type: none"> – calibrate a conductivity measuring system in accordance with industry requirements; and – service a conductivity measuring system in accordance with industry requirements.
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Classification	Industrial Measurement and Control > Industrial Measurement and Control - Maintenance
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Available grade	Achieved
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Guidance Information

- 1 This unit standard has been developed for learning and assessment in a workplace environment.
- 2 References
 ANSI/ISA-51.1-1979 (R1993) *Process Instrumentation Terminology*;
 Electricity Act 1992;
 Electricity (Safety) Regulations 2010;
 Health and Safety at Work Act 2015 and associated regulations;
 ISSN 0114-0663, *New Zealand Electrical Codes of Practice*, available from Worksafe, <https://worksafe.govt.nz>;
 and all subsequent amendments and replacements.
- 3 Definitions
Industry requirements – all asset owner requirements; manufacturers' specifications; and enterprise requirements which cover the documented workplace policies, procedures, specifications, business and quality management requirements relevant to the workplace in which assessment is carried out.
PPE – Personal Protection Equipment that is appropriate to any job being undertaken and can include overalls, safety glasses, gloves, face masks, safety boots, ear muffs etc.
Service – planned activity during normal operation that involves inspection, cleaning, testing, adjusting or making minor repairs to a piece of equipment to ensure that it works properly.
- 4 Recommended skills and knowledge: Unit 28080, *Demonstrate knowledge of liquid analytical measurement systems*.

Outcomes and performance criteria

Outcome 1

Calibrate a conductivity measuring system in accordance with industry requirements.

Performance criteria

- 1.1 Explain and follow safe work procedures.
- Range may include but is not limited to – isolation, process fluid, pressure, PPE.
- 1.2 Select test equipment according to required accuracy and range of devices.
- Range may include but is not limited to – sample solution, probe simulator.
- 1.3 Identify and explain types and causes of typical errors.
- Range may include but is not limited to – probe failure, corrosion, amplifier failure, incorrect temperature compensation.
- 1.4 Calibrate equipment by appropriate adjustments, to a specified accuracy.
- Range may include but is not limited to – zero, span, temperature compensation.
- 1.5 Produce calibration reports, in accordance with industry requirements.

Outcome 2

Service a conductivity measuring system in accordance with industry requirements.

Performance criteria

- 2.1 Locate, interpret, and apply technical information for servicing equipment.
- 2.2 Explain and follow safe work procedures.
- Range may include but is not limited to – isolation, process fluid, pressure, PPE.
- 2.3 Service and verify performance on a conductivity measuring system to ensure continued operation.
- Range may include but is not limited to – tools, materials, parts, techniques, specifications.
- 2.4 Produce service reports in accordance with industry requirements.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	31 October 1995	31 December 2013
Revision	2	30 October 1997	31 December 2013
Revision	3	3 April 2001	31 December 2013
Review	4	22 June 2001	31 December 2013
Review	5	19 May 2008	31 December 2019
Review	6	21 November 2013	31 December 2027
Rollover and Revision	7	28 June 2018	31 December 2027
Review	8	30 January 2025	31 December 2027

Consent and Moderation Requirements (CMR) reference

0003

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.