

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.

Planned review date	31 December 2021
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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	N/A
Rollover and Revision	7	28 June 2018	N/A

Consent and Moderation Requirements (CMR) reference	0003
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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 The Skills Organisation reviewcomments@skills.org.nz if you wish to suggest changes to the content of this unit standard.