Title	**Tune or adjust a plant control loop**		
Level	**4**	**Credits**	**2**

Purpose	This unit standard covers tuning and adjustment of plant control loops and complements Unit 2655, *Tune control loops*, and proves competence in tuning or adjusting a real plant control loop. People credited with this unit standard are able to: – tune or adjust a plant control loop.

Classification	Industrial Measurement and Control > Industrial Measurement and Control - Maintenance

Available grade	Achieved

Guidance Information

1 This unit standard has been developed for learning and assessment in a workplace environment.

2 This unit standard assumes that only manual tuning methods will be used – not auto-tune.

3 Reference
Health and Safety at Work Act 2015, and associated regulations;
and all subsequent amendments and replacements.

4 Definition
Industry requirements – includes all asset owner requirements; manufacturers' specifications; enterprise requirements which cover the documented workplace policies, procedures, specifications, and business requirements; and quality management requirements relevant to the workplace in which the assessment is carried out.

5 Recommended skills and knowledge: Unit 2654, *Demonstrate knowledge of on/off and proportional integral derivative mode control theory and controllers*, and Unit 2655, *Tune control loops*, or demonstrate equivalent knowledge and skills.

Outcomes and performance criteria

Outcome 1

Tune or adjust a plant control loop.

Range flow, level, pressure, temperature.
Evidence of one required.

Performance criteria

1.1 Reference relevant sources of technical information.

Range may include but not limited to – plant operations manual, manufacturers' instructions.

1.2 Explain and follow safe work procedures.

1.3 Coordinate tuning activities with other plant activities and personnel in accordance with industry practice.

1.4 Perform control loop tuning or adjustment using appropriate tuning methods.

Range may include but not limited to – systematic trial and error, initial controller settings, ultimate sensitivity, reaction curve.

1.5 Describe the characteristics of the process being controlled and explain the upstream and downstream effects.

1.6 Produce documentation of the tuning process in accordance with industry requirements, including labelled process charts.

Planned review date	31 December 2021

Status information and last date for assessment for superseded versions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	4 November 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

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.