Title	Select, use, and care for engineering dimensional measuring equipment		
Level	2	Credits	3

PurposePeople credited with this unit standard are able and care for engineering dimensional measuring
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Classification	Mechanical Engineering > Engineering - Measurement

Available grade Achieved	
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Entry information	
Critical health and safety prerequisites	Unit 21912, <i>Apply safe working practices on an engineering worksite</i> , or demonstrate equivalent skills and knowledge.

#### **Explanatory notes**

1 Reference

Health and Safety at Work Act 2015.

2 Definitions

Accepted industry practice – approved codes of practice and standardised procedures accepted by the wider mechanical engineering industry sectors as examples of best practice.

*Workplace procedures* – procedures used by the organisation carrying out the work and applicable to the tasks being carried out. Examples are – standard operating procedures, safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, procedures to comply with legislative and local body requirements.

- 3 Range
  - Examples of engineering dimensional measuring equipment are vernier callipers; internal, external, and depth micrometers; dial test indicator (DTI); height gauges; steel rules.
  - Evidence is required for a micrometer; vernier callipers; and two other items of dimensional measuring equipment.
- 4 Assessment information
  - All activities must be performed in accordance with relevant legislative and/or regulatory requirements; applicable workplace procedures and accepted industry practice.
  - Assessment may be undertaken using imperial or metric units.

# **Outcomes and evidence requirements**

# Outcome 1

Select engineering dimensional measuring equipment.

## **Evidence requirements**

1.1 Equipment is selected in accordance with the geometry of the object to be measured, likely magnitude of dimensions, and required accuracy.

## Outcome 2

Use engineering dimensional measuring equipment.

#### **Evidence requirements**

2.1 Equipment checks are carried out before use and any faults are reported.

Range examples are – deformation, breakages, stickiness, not zeroing, missing parts, expired calibration.

- 2.2 Measurements are taken and equipment is read in accordance with equipment and job requirements.
- 2.3 Measurements are validated by re-measurement.
- 2.4 The finish and integrity of measured objects is maintained during measurement.
- 2.5 Measurements are recorded in documentation.

## Outcome 3

Care for engineering dimensional measuring equipment.

#### **Evidence requirements**

3.1 Equipment is used, handled, and stored to maintain integrity and condition.

Planned review date	31 December 2022
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Process	Version	Date	Last Date for Assessment
Registration	1	23 May 1995	31 December 2011
Revision	2	14 April 1997	31 December 2011
Revision	3	5 January 1999	31 December 2011
Revision	4	23 May 2001	31 December 2011
Review	5	21 February 2005	31 December 2011
Rollover and Revision	6	12 February 2010	31 December 2014
Review	7	17 June 2011	31 December 2021
Review	8	16 March 2017	N/A

#### Status information and last date for assessment for superseded versions

Consent and Moderation Requirements (CMR) reference	0013
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This CMR can be accessed at <u>http://www.nzqa.govt.nz/framework/search/index.do</u>.

## Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMRs). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

# Comments on this unit standard

Please contact Competenz <u>qualifications@competenz.org.nz</u> if you wish to suggest changes to the content of this unit standard.