

|              |   |                |          |
|--------------|---|----------------|----------|
| <b>Title</b> | <b>Select, use, and care for simple measuring devices used in engineering</b> |                |          |
| <b>Level</b> | <b>1</b>  | <b>Credits</b> | <b>2</b> |

|                |   |
|----------------|---|
| <b>Purpose</b> | People credited with this unit standard are able to – select; use; identify faults and care for simple measuring devices used in engineering. |
|----------------|---|

|                       |  |
|-----------------------|--|
| <b>Classification</b> | Mechanical Engineering > Engineering - Measurement |
|-----------------------|--|

|                        |          |
|------------------------|----------|
| <b>Available grade</b> | Achieved |
|------------------------|----------|

---

### Explanatory notes

- 1 Definition  
*Accepted industry practice* – approved codes of practice and standardised procedures accepted by the wider mechanical engineering industry sectors as examples of best practice.
- 2 Assessment information  
Examples of simple measuring devices are – rules, steel tapes, spring callipers, friction callipers, protractors, thermometers, mass balances, spring balances, stop watches, spirit levels, plumb bobs, and fixed gauges (Go/NoGo, thread, length). Evidence is required for the selection, use, and care of at least six measuring devices.

---

### Outcomes and evidence requirements

#### Outcome 1

Select simple measuring devices.

#### Evidence requirements

- 1.1 Measuring devices are selected in accordance with the measurement requirements of the object to be measured, likely magnitude of measurement, and required accuracy.

#### Outcome 2

Use simple measuring devices.

**Evidence requirements**

- 2.1 Device is used in accordance with equipment and job requirements.
- 2.2 Measurements are taken within the accuracy capability of the device.
- 2.3 Measurements are validated by re-measurement.
- 2.4 Condition and integrity of measuring device and measured object are maintained during measurement.
- 2.5 Measurements are recorded to meet job requirements.

**Outcome 3**

Identify faults and care for simple measuring devices.

**Evidence requirements**

- 3.1 Common faults in measuring devices are identified.  
  
Range examples are – deformation, breakages, stickiness, not zeroing, missing parts, expired calibration; evidence of four faults.
- 3.2 Measuring devices are handled and stored to maintain integrity and condition.

|                            |                  |
|----------------------------|------------------|
| <b>Planned review date</b> | 31 December 2022 |
|----------------------------|------------------|

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

| 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 2014         |
| Review       | 6       | 17 June 2011     | 31 December 2021         |
| Review       | 7       | 16 March 2017    | N/A                      |

|  |      |
|--|------|
| <b>Consent and Moderation Requirements (CMR) reference</b> | 0013 |
|--|------|

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

**Please note**

Providers must be granted consent to assess against standards (accredited) by NZQA, or an inter-institutional body with delegated authority for quality assurance, 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 [qualifications@competenz.org.nz](mailto:qualifications@competenz.org.nz) if you wish to suggest changes to the content of this unit standard.