

Title	Select, use, and care for engineering marking-out equipment		
Level	2	Credits	3

Purpose	People credited with this unit standard are able to – plan engineering marking out and select marking-out equipment and materials; use engineering marking out equipment and materials; and care for engineering marking-out equipment.
----------------	---

Classification	Mechanical Engineering > Engineering - Measurement
-----------------------	--

Available grade	Achieved
------------------------	----------

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.
Job specifications – instructions relevant to the safe completion of the specific task, such as technical specifications, assembly instructions, drawings, parts lists, standards, codes of practice, test and commissioning procedures, and verbal instructions
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 marking-out materials are – marking blue or spirit blue (engineer’s blue), chalk.
 - Examples of marking-out equipment are – marking-out tables, engineer's squares, rules, straight edges, scribing blocks, height gauges, trammels, protractors, scribes, vee blocks, parallels, angle plates, dividers, centre punches. Evidence is required for the selection, use, and care of at least six items of marking out equipment.

- Evidence for outcomes 1 and 2 must include – the positions of a minimum of 5 equally spaced holes on a given pitch circle diameter (PCD).

4 Assessment information

All activities must be performed in accordance with relevant legislative and/or regulatory requirements; applicable workplace procedures and accepted industry practice.

Outcomes and evidence requirements

Outcome 1

Plan engineering marking out and select marking-out equipment and materials.

Evidence requirements

- 1.1 Marking-out sequence and process is planned.
- 1.2 Marking-out equipment and materials are selected, according to the task and accuracy requirements.

Outcome 2

Use engineering marking-out equipment and materials.

Evidence requirements

- 2.1 Equipment checks are carried out before use and any faults are reported.
Range examples are – deformed, worn, broken or missing parts.
- 2.2 Marking-out is carried out in accordance with job specifications.
- 2.3 Marking-out is validated by re-checking.

Outcome 3

Care for engineering marking-out equipment.

Evidence requirements

- 3.1 Marking-out equipment is handled and stored to maintain integrity and condition.

Planned review date	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

Consent and Moderation Requirements (CMR) reference	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, 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 if you wish to suggest changes to the content of this unit standard.