

Title	Demonstrate knowledge of key performance indicators to improve production and quality in a manufacturing operation		
Level	5	Credits	15

Purpose	People credited with this unit standard are able to: demonstrate knowledge of key performance indicators; quality management; and critical control points; and evaluate and recommend improvements to key performance indicators for production and quality in a manufacturing operation.
----------------	---

Classification	Manufacturing Skills > Manufacturing Processes
-----------------------	--

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

Guidance Information

- 1 Legalisation relevant to this unit standard includes:
Health and Safety at Work Act 2015.
- 2 Definition
Workplace procedures refer to procedures used by the organisation carrying out the work and applicable to the tasks being carried out. Examples are – standard operating procedures, site safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, and procedures to comply with legislative and local body requirements.
- 3 Assessment information
 - a All activities and evidence must be in accordance with workplace procedures.
 - b Candidates are encouraged to refer to and use relevant literature and text such as any training manuals, the reference texts, relevant industry codes of practice, and standards.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of key performance indicators as they apply to a manufacturing operation.

Performance criteria

1.1 The objective of key performance indicators relating to production is explained.

Range evidence of a minimum of three key performance indicators is required.

1.2 The objective of key performance indicators relating to quality is explained.

Range evidence of a minimum of two key performance indicators is required.

1.3 Key performance indicators relating to production and quality are interpreted in terms of how they relate to the candidate's responsibilities.

Range a minimum of four key performance indicators is required.

Outcome 2

Demonstrate knowledge of quality management as it applies to a manufacturing operation.

Performance criteria

2.1 The underlying principles of quality management are explained.

Range definition of quality, customer focus (internal and external), identifying improvement opportunities, problem solving, measuring improvement, continuous improvement, quality management implementation.

2.2 Different examples of waste or poor quality in a work area are identified and the impact on the business is explained in terms of cost.

Range evidence of a minimum of five examples is required.

2.3 Supply chain management is explained in terms of its potential impact on production processes and quality.

Outcome 3

Demonstrate knowledge of critical control points for production and quality in a manufacturing operation.

Range a minimum of one production critical control point and one quality critical control point.

Performance criteria

- 3.1 Critical control points for production and quality are identified and explained in terms of their impact on the achievement of key performance indicators.
- 3.2 Managing the communication process for non-conformance at a critical control point is explained.
- 3.3 The impact critical control points have on production and quality is explained in terms of cost.

Outcome 4

Evaluate and recommend improvements to key performance indicators for production and quality in a manufacturing operation.

Range a minimum of one production key performance indicator and one quality key performance indicator.

Performance criteria

- 4.1 An opportunity to improve a key performance indicator is identified in consultation with relevant stakeholders.
- 4.2 Data is gathered and analysed against the existing key performance indicator to define the current performance levels.
- Range data for a minimum of two production runs relevant to the key performance indicator is required.
- 4.3 Data gathered and analysed for performance criterion 4.2 is evaluated and a solution for improvement is selected.
- 4.4 A solution to improve the key performance indicators is reported on and presented to management.

Planned review date	31 December 2025
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	19 November 2015	31 December 2023
Review	2	26 August 2021	N/A

Consent and Moderation Requirements (CMR) reference	0013
--	------

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

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.