Title	Demonstrate knowledge of techniques to generate, evaluate, scope and present new ideas in a manufacturing operation		
Level	5	Credits	15

Purpose	People credited with this unit standard are able to demonstrate knowledge of techniques to: generate new ideas; gather and analyse data to evaluate new ideas; and determine benefits and constraints relating to new ideas and report a proposal for implementation, in a manufacturing operation.
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Classification	Manufacturing Skills > Manufacturing Processes
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Available grade	Achieved
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#### **Guidance Information**

1 Legislation 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.

## 4 Range

New ideas may include but are not limited to – new production processes, new products, new quality processes;

evidence of a minimum of one new idea is required.

New idea must provide the potential for significant monetary gain relative to the size of the business.

# Outcomes and performance criteria

#### **Outcome 1**

Demonstrate knowledge of techniques to generate new ideas in a manufacturing operation.

#### Performance criteria

- 1.1 Techniques for generating new ideas are explained in terms of their application.
  - Range evidence of a minimum of three techniques is required.
- 1.2 Two possible techniques for generating new ideas are selected and the reasons for the selections are explained in terms of their relevance to production or quality processes.
- 1.3 One technique is used in consultation with relevant stakeholders to generate a new idea to improve a production or quality process.

#### Outcome 2

Demonstrate knowledge of techniques to gather and analyse data to evaluate new ideas in a manufacturing operation.

## Performance criteria

- 2.1 Techniques for gathering and analysing information are explained in terms of their application.
  - Range evidence of a minimum of three techniques is required.
- 2.2 Possible techniques for gathering and analysing information are selected and the reasons for the selections are explained in terms of their relevance to production or quality processes.
  - Range evidence of a minimum of two techniques is required.
- 2.3 A technique for gathering and analysing information is used to evaluate, quantify and develop the scope for implementing the new idea generated for performance criterion 1.3.

## **Outcome 3**

Demonstrate knowledge of techniques to determine benefits and constraints relating to new ideas and report a proposal for implementation in a manufacturing operation.

## Performance criteria

- 3.1 Techniques to determine benefits and constraints relating to the new idea generated for performance criteria 1.3 are identified and explained in terms of their application.
- 3.2 Benefits and constraints are identified using techniques identified in performance criteria 3.1 and explained in terms of their impact on the idea scope developed as part of performance criterion 2.3.

Range evidence of a minimum of two benefits and two constraints are required.

3.3 A cost analysis for the implementation of the new idea is developed.

Range cost analysis may include but is not limited to – value verses volume, impact loss, risk analysis, capital expenditure.

3.4 A report is written and a presentation prepared to outline the proposal for implementation of the new idea to management.

Planned review date	31 December 2025
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# 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.		

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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.