Title	Describe the manufacturing variables for processed cheese		
Level	5	Credits	15

Purpose	People credited with unit standard are able to describe: the elements of a given customer specification; the raw materials required for a given customer specification; the cooking process variables for a given customer specification; the forming process variables for a given customer specification; and the packaging variables, for a given customer specification for processed cheese.
	People credited with this unit standard will also be able to complete a manufacturing variable report for a given customer specification for processed cheese.

Classification	Dairy Processing > Milk Products

Available grade Achieved	
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Guidance Information

- 1 Legislation and regulations relevant to this unit standard include but are not limited to:
 - Animal Products Act 1999;
 - Health and Safety at Work Act 2015;
 - Animal Products (Dairy) Regulations 2005.
- 2 Definition

Organisational requirements – instructions to staff on policies and procedures which are documented in memo or manual format and are available in the workplace. These requirements include but are not limited to – manufacturer specifications, company quality management requirements, site procedures, and legislative requirements.

Outcomes and performance criteria

Outcome 1

Describe the elements of a given customer specification for processed cheese.

Performance criteria

1.1 Describe customer specifications to ensure correct and current versions are being used in accordance with organisational requirements.

Range customer specifications include but are not limited to – chemistry, functional, sensory, microbiological, packaging.

- 1.2 Describe specification targets in terms of maximum and minimum requirements for each element.
- 1.3 Confirm specification requirements are within plant processing and packaging capabilities in accordance with organisational requirements.
- 1.4 Describe country regulations to ensure conformance against specifications.

Outcome 2

Describe the raw materials required for a given customer specification for processed cheese.

Performance criteria

- 2.1 Describe type and quantities of raw materials in accordance with organisational requirements.
 - Range raw materials include but are not limited to cheese, dairy ingredients, emulsifying salts, additives.
- 2.2 Describe alternative raw materials in terms of their advantages and disadvantages.

Range advantages and disadvantages include but are not limited to those related to – texture, body, product yield, flavour, seasonality.

Outcome 3

Describe the cooking process variables for a given customer specification for processed cheese.

Performance criteria

- 3.1 Describe cooking process variables in accordance with organisational requirements.
 - Range cooking process variables include but are not limited to agitation rpm, temperatures, times, pressures, homogenisation.

- 3.2 Describe alternative cooking process variables in terms of their advantages and disadvantages.
 - Range advantages and disadvantages include but are not limited to those related to texture, body, product yield, flavour.

Outcome 4

Describe the forming process variables for a given customer specification for processed cheese.

Performance criteria

4.1 Describe the forming process variables in accordance with organisational requirements.

4.2 Describe alternative forming process variables in terms of their advantages and disadvantages.

Range advantages and disadvantages include but are not limited to those related to – texture, body, product yield, flavour.

Outcome 5

Describe the packaging variables for a given customer specification for processed cheese.

Performance criteria

- 5.1 Describe packaging variables and quantities in accordance with organisational requirements.
 - Range packaging variables include but are not limited to flexible packaging, rigid packaging, foils, seal integrity, gas flushing.
- 5.2 Describe alternative packaging variables in terms of their advantages and disadvantages.
 - Range advantages and disadvantages include but are not limited to those related to configuration, shelf-life, cost.

Range forming process variables include but are not limited to – temperatures, weight control, pack configuration, cooling.

Outcome 6

Complete a manufacturing variable report for a given customer specification for processed cheese.

Performance criteria

- 6.1 Describe manufacturing variables to meet the given customer specification.
 - Range manufacturing variables include but are not limited to raw materials, cooking, forming, packaging.
- 6.2 Complete manufacturing variables report in accordance with organisational requirements.

Planned review date	31 December 2026
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	28 April 1997	31 December 2013
Revision	2	7 August 1997	31 December 2013
Revision	3	2 July 1999	31 December 2013
Revision	4	13 June 2003	31 December 2013
Rollover and Revision	5	20 June 2006	31 December 2013
Rollover	6	17 July 2009	31 December 2013
Review	7	17 May 2012	31 December 2016
Review	8	18 June 2015	31 December 2024
Review	9	28 April 2022	N/A

Consent and Moderation Requirements (CMR) reference	0022	
This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.		

Comments on this unit standard

Please contact Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council <u>qualifications@hangaarorau.nz</u> if you wish to suggest changes to the content of this unit standard.