

Title	Describe the prevention and control of foreign matter contamination of dairy products		
Level	3	Credits	5

Purpose	People credited with this unit standard are able to describe: the nature and consequences of foreign matter contamination of dairy products; the prevention of foreign matter contamination of dairy products; and the detection of foreign matter in dairy products and handling of potential foreign matter contamination, in a dairy processing operation.
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Classification	Dairy Processing > Milk Processing
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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; and any subsequent amendments.
- 2 Definitions

Foreign matter – any physical matter that does not belong in the product.

Utilities – steam, water, compressed air or gases.

Outcomes and performance criteria

Outcome 1

Describe the nature and consequences of foreign matter contamination of dairy products in a dairy processing operation.

Performance criteria

1.1 Describe the nature of foreign matter contamination of dairy products in terms of types of foreign matter and potential origins.

Range potential origins may include but are not limited to – ingredients and additives, utilities, processing plant and equipment, environment, people, intrusive maintenance, in process sampling, cleaning, packaging materials, damage during transport and storage;
evidence of six potential origins is required.

1.2 Describe consequences of foreign matter in dairy products in terms of economic and marketing implications to the industry and dairy company.

Outcome 2

Describe the prevention of foreign matter contamination of dairy products in a dairy processing operation.

Performance criteria

2.1 Describe the prevention of foreign matter contamination in terms of focus on preventative measures as opposed to foreign matter detection systems and end product testing.

2.2 Describe the prevention of foreign matter contamination of dairy products in terms of controls relative to an individual's responsibilities.

Range responsibilities may include but are not limited to – entry procedures, hygiene controls, plant and equipment checks, reporting of potential foreign matter hazards;
evidence of three responsibilities is required.

2.3 Describe the prevention of foreign matter contamination of dairy products in terms of the use of preventative maintenance systems to reduce equipment failures and consequential foreign matter hazards.

Range evidence of one preventative maintenance system is required.

2.4 Describe the prevention of foreign matter contamination of dairy products in terms of the control of intrusive maintenance.

Range control of intrusive maintenance includes but is not limited to – plant entry procedures, post-intrusion check.

Outcome 3

Describe the detection of foreign matter in dairy products and procedures to follow for foreign matter contamination in a dairy processing operation.

Performance criteria

3.1 Describe detection systems used to detect the presence of foreign matter in ingredients and product in terms of location in process, nature of foreign matter and limitations.

Range detection systems may include but are not limited to – metal detectors, x-ray systems, magnets, filters, sediment pad testing, sifter screens;
evidence of three systems is required;
limitations include but are not limited to – product type, product effect, size of product, size of aperture, location of contamination, type of contamination, size and shape of contamination.

3.2 Describe the detection of foreign matter in dairy products in terms of monitoring and checking of detection systems for correct operation and corrective actions if detection system is not operating correctly.

Range monitoring and checking of detection systems may include but are not limited to – pre-start, during production, end of shift production run.

3.3 Describe the detection of foreign matter in dairy products in terms of procedures to follow if foreign matter is detected.

Range procedures may include but are not limited to – identification of potentially contaminated product, trace backs, corrective actions.

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	5 July 1999	31 December 2014
Revision	2	13 June 2003	31 December 2014
Rollover	3	26 January 2007	31 December 2016
Review	4	18 June 2015	31 December 2024
Revision	5	19 November 2015	31 December 2024
Review	6	25 March 2021	N/A
Revision	7	26 January 2023	N/A

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

Comments on this unit standard

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