



Australian Government

FBPFST5002 Identify and implement required process control for a food processing operation

Release: 1

FBPFST5002 Identify and implement required process control for a food processing operation

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceutical Training Package Version 2.0.

Application

This unit of competency describes the skills and knowledge required to determine the required process control system for a food production process. The individual is required to demonstrate deep knowledge in a specific technical area and to design and communicate solutions to sometimes complex problems.

This unit applies to individuals who are responsible for maintaining product safety, quality and efficiency in food production, including general food production, meat and seafood industries, and exercise autonomy in undertaking complex work.

No occupational licensing or certification requirements apply to this unit at the time of publication. However, legislative and regulatory requirements for food processing exist, so local requirements must be checked. All work must comply with Australian food safety standards and relevant codes of practice.

Pre-requisite Unit

Nil

Unit Sector

Food science and technology (FST)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Analyse production processes	1.1 Identify the processes used in the food production 1.2 Establish the characteristics used to define the operation of a process

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Identify the operating principles of the processes 1.4 Establish the operating standards, capabilities and maintenance requirements for equipment and accessories used in the specified production process 1.5 Define product characteristics and common variations
2. Determine control mechanisms, modes of control and data collection points for a specified food production process	2.1 Examine the operation of different types of control mechanisms 2.2 Determine modes of control that can be used with the various control mechanisms 2.3 Document data requirements and collection points appropriate for food safety, quality and production standards 2.4 Adjust procedures to deal with non-conformance in relation to process and the final product
3. Verify process control systems for food process	3.1 Consult with appropriate operational, quality and maintenance personnel to ensure understanding of process control requirements for food processes 3.2 Analyse standard operational procedures for accuracy and relevance 3.3 Conduct test runs and confirm compliance with requirements 3.4 Apply statistical analysis to verify the process and recommend required system improvements 3.5 Arrange the ongoing collection and analysis of required data

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret food safety guidelines and regulations - Interpret standard operational procedures
Navigate the world of work	Monitor adherence to legal and regulatory standards and responsibilities for self and others

Skill	Description
Interact with others	Clarify the purpose and possible actions to be taken as a result of work-related communications
Get the work done	- Problem-solve issues as they arise - Monitor outcomes of decisions and identify key product quality system concepts and principles that may be adaptable to future situations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPFST5002 Identify and implement required process control for a food processing operation	FDFST5002A Identify and implement required process control for a food processing operation	Updated to meet Standards for Training Packages Minor changes to Performance Criteria to clarify intent	Equivalent unit

Links

Companion Volume Implementation Guides are found in VETNet: -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPFST5002 Identify and implement required process control for a food processing operation

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Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has determined the required process control for at least one food processing operation, including:

- analysing process control methods used to achieve the food safety, quality and production standards
- selecting process control mechanisms and processes appropriate to the food production operation
- adjusting procedures to deal with non-conformance
- determining data collection requirements
- monitoring data collection to ensure it is timely, relevant and accurate
- calculating, analysing and verifying relevant statistical measures
- conducting a trend analysis of food processing data
- communicating control requirements to staff
- forming conclusions from statistics-based process control information.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- the basic operating principles of equipment and accessories used in food production processes and systems
- different types of processes used in food production systems
- the inter-relationships between food processing stages and the effect of variation in processing parameters on process outcome and on final product
- specific plant process operations
- emergency shutdown procedures
- instrumentation and control systems

- the operation process control mechanisms in the relevant processing operation
- typical instrumentation used for process control in the relevant processing operation
- product specifications and tolerances
- system operating parameters
- data collection requirements for process control mechanisms
- methods used for statistical analysis of process control data
- reporting requirements for process control outcomes
- health and safety in the workplace hazards and controls relating to work processes.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a workplace setting or an environment that accurately represents a real workplace
- resources, equipment and materials:
 - production process and related equipment, manufacturers' advice and operating procedures
 - methods and related software systems for collecting data and calculating yields, efficiencies and material variances appropriate to production environment
- specifications:
 - tests used to report relevant product/process information and recorded results.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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