



Australian Government

FBPFST5001 Monitor refrigeration and air conditioning systems in food processing

Release: 1

FBPFST5001 Monitor refrigeration and air conditioning systems in food processing

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 coordinate the monitoring of refrigeration and air conditioning systems in food processing and storage. The individual is required to demonstrate deep knowledge in a specific technical area and to design solutions to sometimes complex problems.

This unit applies to individuals who are responsible for maintaining product safety and quality in food processing, 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. Coordinate a refrigeration system in the production of food	1.1 Identify refrigerants and their required properties 1.2 Monitor performance of the refrigeration system in the production 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>
products	1.3 Analyse performance of a refrigeration system 1.4 Identify and evaluate ways to improve the performance of the refrigeration system
2. Coordinate an air conditioning system in the production of food products	2.1 Identify common forms of air conditioning systems used in the production of food products 2.2 Assess air conditioning requirements for a given situation in the production process 2.3 Identify variables on a psychrometric chart 2.4 Apply psychrometric charts for the analysis of air conditioning systems in the production process 2.5 Monitor the performance of the air conditioning system in the production process 2.6 Rectify issues with performance of air conditioner 2.7 Monitor energy efficiency to reduce costs and environmental impacts 2.8 Report problems to the designated person

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 industry standards - Interpret technical manuals for refrigeration and air conditioning systems
Numeracy	- Maintain and analyse data resulting from testing of refrigeration and air conditioning system - Determine calibration procedures and schedule for test equipment
Get the work done	Problem-solve issues as they arise

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPFST5001 Monitor refrigeration and air conditioning systems in food processing	FDFST5001A Monitor refrigeration and air conditioning systems in food processing	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 FBPFST5001 Monitor refrigeration and air conditioning systems in food processing

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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 monitored refrigeration and/or air conditioning systems in food processing on at least one occasion, and:

- identified characteristics of a refrigeration system in the production of food products
- interpreted the function of key components in a refrigeration system
- appraised the performance of a refrigeration system in the production process
- identified the common forms of air conditioning systems used in the production of food products
- recognised common faults and identified how the faults should be rectified.

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:

- refrigeration systems in the production of food products
- refrigerants and their properties
- function of key components in a refrigeration system
- common forms of air conditioning systems used in the production of food products
- elements and uses of psychrometric charts
- energy efficiency and environmental impacts of refrigeration and air conditioning systems
- 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:
 - refrigeration and air conditioning systems and related equipment, manufacturers' advice and operating procedures
- specifications:
 - operating system data.

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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