



Australian Government

FBPHVB3001 Operate and monitor a cooling and wrapping process

Release: 1

FBPHVB3001 Operate and monitor a cooling and wrapping process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 6.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a process to cool and wrap baked products such as cake, bread or muffins.

The unit applies to operators who take responsibility for cooling and wrapping operations in a production baking environment. The work includes identifying and providing solutions to routine and some non-routine problems.

All work must be carried out to comply with workplace procedures according to state/territory health and safety and food safety regulations, legislation and standards that apply to the workplace.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

High Volume Baking (HVB)

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. Prepare the cooling and cutting equipment and process for operation	1.1 Confirm availability of baked product to meet production requirements 1.2 Identify health and safety hazards and address risks, including

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	using appropriate personal protective clothing and equipment 1.3 Identify and confirm equipment is clean, and maintenance requirements have been met, according to health, safety and food safety requirements 1.4 Fit machine components and related attachments, and adjust to meet operating and safety requirements 1.5 Select processing and operating parameters to meet safety and production requirements 1.6 Ensure product date codes on wrapping are correct 1.7 Carry out pre-start checks according to operator instructions
2. Operate and monitor equipment	2.1 Start and operate the cooling and wrapping process according to workplace procedures 2.2 Monitor equipment to ensure optimal operation 2.3 Monitor the process to confirm that product temperature is suitable to be wrapped 2.4 Monitor the process of wrapping to ensure specifications are met 2.5 Identify, rectify and report out-of-specification product and process outcomes 2.6 Conduct work and maintain a clean and tidy workplace according to workplace environmental and food safety procedures
3. Shut down the process	3.1 Complete the process safely according to workplace procedures 3.2 Identify and report maintenance requirements according to workplace procedures 3.3 Maintain workplace records accurately according to workplace procedures

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
-------	-------------

Skill	Description
Reading	Interpret work instructions and product specifications
Writing	Record processing information using digital and/or paper-based formats
Oral communication	Follow instructions and ask questions to clarify information
Numeracy	- Interpret symbols and numbers on temperature gauges and scales - Use basic arithmetic to calculate quantities - Check product use-by and best-before dates on wrapping

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPHVB3001 Operate and monitor a cooling and wrapping process	FBPPBK2001 Operate a cooling and slicing process	Unit code and title updated to better match task Emphasis on slicing changed to wrapping for broader coverage Minor changes to Performance Criteria to clarify task Foundation Skills refined Performance Evidence clarified Minor changes to Knowledge Evidence and Assessment Conditions to clarify requirements	Not equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPHVB3001 Operate and monitor a cooling and wrapping process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 6.0.

Performance Evidence

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

There must be evidence that the individual has operated and monitored cooling and wrapping equipment to cool and wrap at least one batch of product to meet specifications, including:

- applying safe work procedures
- following food safety procedures
- confirming cooling equipment settings, including:
 - conveyor speed
 - cooling tunnel settings
 - guides
 - feeders
- monitoring and adjusting process equipment to achieve product specifications, including:
 - temperature gauges
 - throughput
 - product appearance, dimensions and weight
 - packaging materials and seals
- taking corrective action in response to typical faults and inconsistencies.

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:

- purpose and basic principles of cooling and wrapping process
- basic operating principles of cooling and wrapping equipment and main components, including:
 - status and purpose of guards
 - operating capacities and applications of equipment

- purpose and location of sensors and related feedback instrumentation
- types and safe operating procedures for cooling and wrapping equipment, including:
 - conveyors
 - cooling tunnels
 - guides
 - packaging material feeds
 - wrapping sealers
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- basic operating principles of process control and relationship between control panels and systems, and cooling and wrapping equipment
- key features of flow of cooling and wrapping process, and effect of outputs on downstream processes
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters, including:
 - effect of ambient temperature on the cooling process
 - possible cause of condensation formation on product from the cooling tunnel
 - issues with wrapping seals
- methods used to monitor the cooling and wrapping process, including:
 - inspecting, measuring and testing
 - inspection or test points (control points)
 - related procedures and recording requirements
- common causes of variation, and corrective action required
- good manufacturing practices (GMP) relevant to work task
- health and safety hazards and controls, including:
 - risks associated with working with refrigerant, and action required in the event of a leak
 - isolation, lock-out and tag-out procedures and responsibilities
- contamination/cross-contamination and food safety risks associated with the process, and related control measures
- fundamentals of common microbiological, physical, chemical and allergen hazards related to the foods handled in the work area, including the types of hazards likely to occur, the conditions under which they occur, possible consequences, and control methods to prevent occurrence
- equipment shutdown requirements relevant to performance evidence, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- procedures and responsibility for reporting production and performance information
- emerging technologies related to high volume production baking
- cleaning and sanitation procedures required for production equipment and work area
- recording procedures to track traceability of product.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - a high volume production bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - cooling and wrapping equipment, including conveyors, cooling tunnels, wrapping arms
 - product for cooling and wrapping
 - wrapping materials
 - cleaning materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch specifications, control points and processing parameters
 - recording requirements and procedures.

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

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>