



Australian Government

FBPHVB3017 Operate a bread dough mixing and development process

Release: 1

FBPHVB3017 Operate a bread dough mixing and development 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 dough mixing process.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of a dough mixing process 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 dough making equipment and process for operation	1.1 Confirm materials are available to meet product specification requirements 1.2 Select, fit and use personal protective equipment and clothing

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 and confirm cleaning and maintenance requirements have been met according to health, safety and food safety procedures 1.4 Weigh or measure ingredients to meet recipe requirements 1.5 Fit and adjust mixing equipment in accordance with operating requirements 1.6 Enter processing and operating parameters to meet safety and production requirements 1.7 Carry out pre-start checks as required by workplace procedures
2. Operate and monitor equipment	2.1 Start up the dough mixing process according to workplace procedures 2.2 Introduce ingredients to mixing process in correct sequence and quantity 2.3 Monitor equipment and services to ensure optimal operations 2.4 Monitor process and test samples to confirm dough meets mixing and development specifications 2.5 Identify and rectify or report outcomes that fail to meet product specifications 2.6 Transfer finished dough according to workplace procedures 2.7 Maintain work area and conduct activities according to workplace procedures, food safety and environmental guidelines 2.8 Maintain workplace records in required format
3. Shut down the process	3.1 Identify appropriate shutdown procedure 3.2 Shut down process safely and clean equipment according to workplace procedures 3.3 Identify and report maintenance issues according to workplace procedures 3.4 Ensure waste is disposed of in line with environmental requirements
4. Recognise and correct common faults	4.1 Test bread dough to ensure it meets specifications 4.2 Identify causes of typical faults and how they would be rectified according to workplace requirements 4.3 Discard faulty product according to workplace and environmental guidelines

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 standard operating procedures and directions for the safe operation of equipment
Writing	Complete processing records using digital and/or paper-based formats
Numeracy	- Measure product and ingredients using weight (g, kg, T) and volume (ml, L), to two decimal points - Confirm settings, including mixing rate, mixing time, water and flour temperature

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPHVB3017 Operate a bread dough mixing and development process	FBPPBK3001 Operate a dough mixing process	Unit code and title updated Minor changes to Performance Criteria to clarify intent Element 4 added 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 FBPHVB3017 Operate a bread dough mixing and development 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 a dough mixing and development process to produce at least one batch of two different formulations of bread dough to meet product specifications, including:

- applying safe work practices
- applying food safety procedures to work practices
- loading ingredients in correct quantities and sequences for the recipe and the process
- 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 dough-making process, including components of wheat, flour types and grades relevant to products produced, yeast activity and dough development
- effects of variation in ingredient quality on the dough produced
- basic operating principles of equipment, including equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- good manufacturing practices (GMP) relevant to work task
- settings relevant to dough making equipment being used, including:
 - mixing rate
 - mixing time and work input
 - ice and water requirements
 - water temperature

- speed
- flour temperature
- cooling
- vacuum delay and level
- slurry addition
- flow of the dough-making process, including the stages and changes that occur during baking, and the effect of outputs on downstream processes
- significance of factors such as dough temperature, development, time, water addition and temperature, yeast activity
- required characteristics of dough, and effect of dough characteristics and variation on the final product
- typical faults that occur as a result of ingredients or processing parameters, and corrective action required where operation is outside specified parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems, and procedures and responsibilities for addressing issues
- methods used to monitor the dough making process, including inspecting, measuring and testing
- contamination/cross-contamination, cross-contact allergen risks and food safety risks associated with mixing dough, and related control measures
- requirements of different shutdowns as appropriate to the dough making process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- procedures and responsibility for reporting production and performance information
- workplace cleaning procedures for the dough making process
- environmental issues and controls relevant to the dough making process, including waste collection and handling procedures
- emerging technologies related to high volume production baking
- 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:
 - ingredients to be processed
 - dough mixing and development equipment and related services
 - personal protective equipment
 - cleaning materials and equipment
- specifications:

- dough specification/recipe
- work procedures, including advice on safe work practices, food safety, quality, cleaning and environmental requirements
- manuals related to operation of dough making equipment.

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>