## **Modification history**

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 6.0
FBPHVB3X10	Operate and monitor a pastry baking process SeeFBPOPR2029
Application	This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a pastry baking process.
	This unit applies to individuals who take responsibility for operating and monitoring ovens to bake pastries a high volume 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, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.
	No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.
Prerequisite Unit	Nil
Unit Sector	High volume baking (HVB)

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Prepare for work in baking area	<ul> <li>1.1 Check and confirm production schedule</li> <li>1.2 Confirm materials are available to meet production requirements</li> <li>1.3 Wear appropriate personal protective clothing and ensure correct fit</li> <li>1.4 Prepare pastry products and trays to meet production requirements including any pre-bake finishing requirements to meet product specifications</li> <li>1.5 Confirm services are available and ready for operation</li> </ul>
2. Prepare the process for operation	<ul> <li>2.1 Check oven is clean and not locked out</li> <li>2.2 Enter baking temperatures and other parameters as required to meet safety, food safety and production requirements</li> <li>2.3 Carry out pre-start checks according to workplace health and safety and operating requirements</li> <li>2.4 Position loading mechanism to feed pastries into oven in line with specifications</li> </ul>
3. Operate and monitor equipment	<ul> <li>3.1 Start and operate the baking process to ensure optimal performance</li> <li>3.2 Monitor equipment and services to ensure optimal performance</li> <li>3.3 Monitor product to ensure specifications are met</li> <li>3.4 Take samples and test product to ensure it meets specifications</li> <li>3.5 Identify, adjust and report out-of-specification equipment, product or process outcomes according to workplace requirements</li> <li>3.6 Unload and transfer baked products for cooling and finishing</li> <li>3.7 Follow and apply workplace cleaning procedures and environmental requirements</li> <li>3.8 Complete batch processing records according to workplace requirements</li> </ul>

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
4. Shut down the process	<ul> <li>4.1 Identify the appropriate shutdown procedure</li> <li>4.2 Shut down the process safely according to operating procedures</li> <li>4.3 Prepare equipment for cleaning in preparation for maintenance or next start-up</li> <li>4.4 Identify and report maintenance requirements according to workplace requirements</li> <li>4.5 Complete workplace records according to workplace requirements</li> </ul>
5. Recognise and correct common faults	<ul> <li>5.1 Test baked product to ensure it meets specifications</li> <li>5.2 Identify cause of typical faults and how they can be rectified according to workplace requirements</li> <li>5.3 Discard faulty products according to workplace and environmental guidelines</li> </ul>

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	
Learning	Problem-solve issues with process to ensure quality outcomes	
Reading	Interpret workplace and standard operating procedures relevant to work task	
	Interpret production requirements	
Writing	Record processing data using digital and/or paper-based formats	
Numeracy	<ul> <li>Monitor and interpret baking control indicators and data, including temperature (°C), time, humidity</li> <li>Monitor supply and flow of materials to and from the process</li> </ul>	

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
FBPHVB3X10 Operate and monitor a pastry baking process		Newly created unit	No equivalent unit

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

TITLE	Assessment requirements for FBPHVB3X10 Operate and monitor a pastry baking process
Performance Ev	dence
An individual demons unit.	trating competency must satisfy all of the elements and performance criteria in this
<ul> <li>one batch of pastries</li> <li>applying safe wo</li> <li>following food sa</li> <li>confirming oven</li> <li>correct oven</li> <li>oven zone te</li> <li>conveyor spe</li> <li>circulation ar</li> <li>water seals</li> <li>burner contro</li> <li>heights, guid</li> </ul>	ety procedures settings and parameters, including: settings for baking time mperatures ed, loaders and dischargers d exhaust fans Is and steam es and air blowers
	pastries, including quantities and pastry appearance (colour and sheen, uniformity and size, and moisture)

• taking corrective action in response to typical faults and inconsistencies in separated product.

## 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 each stage of the baking process, including the stages of the baking
  process and changes that occur in the product, the effect of variables (time, temperature and
  humidity), and oven zones as appropriate to oven type
- basic operating principles of equipment, including:
  - the difference between convection and impingement ovens
    - main equipment components
    - status and purpose of guards
    - equipment operating capacities and applications
  - the purpose and location of sensors and related feedback instrumentation
- types of ovens typically used in high volume baking environments, and the principles of heat transfer, including:
  - convection
  - conduction
  - radiation
  - electromagnetic radiation
- quality characteristics to be achieved by the baked product
- process specifications, procedures and operating parameters for different baked pastry products
- operating requirements, parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the baking process, including inspecting, measuring and testing, by the process
- inspection or test points (control points) in the baking process and the related procedures and recording requirements, including the ability to conduct dew point and/or wet bulb tests
- contamination/cross contamination and food safety risks associated with the baking process and related control measures
- 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
- health and safety hazards and controls

## **Knowledge Evidence**

- requirements of different shutdowns as appropriate to the baking process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities relevant to operating a baking process
- environmental issues and controls relevant to the baking process, including waste/rework collection and handling procedures related to the process
- purpose and operating procedures for related processes, including in-line proving and finishing equipment where relevant
- basic operating principles of process control where relevant, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for baking equipment
- cleaning and sanitation procedures for baking equipment
- procedures and responsibility for reporting production information and traceability of product.

## **Assessment Conditions**

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

- a food processing workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
  - personal protective equipment
  - baking and depanning equipment and services, and related equipment
  - product to be baked
  - · sampling schedules and test procedures and equipment
- specifications:
  - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
  - information on equipment capacity and operating parameters
  - specifications, control points and processing parameters
  - production schedule and recipe/batch instructions
  - documentation and 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.

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