



Australian Government

FBPOPR2029 Operate a baking process

Release: 1

FBPOPR2029 Operate a baking process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down processes used to bake and depan baked products.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing production workplace. It typically applies to the production worker responsible for producing baked products that may include pastry, biscuits, cake and other dough-based products that may be fresh or frozen.

This unit does not apply to production of bread. For bread baking, refer to the relevant plant baking and/or retail baking units of competency.

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.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

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 baking equipment and process	1.1 Confirm materials are available to meet operating requirements 1.2 Wear appropriate personal protective clothing and ensure correct

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for operation	fit according to work health and safety requirements 1.3 Prepare materials to meet production requirements 1.4 Confirm services are available and ready for operation 1.5 Check equipment performance and pans, and adjust according to operating requirements 1.6 Set the process to meet safety and production requirements 1.7 Conduct pre-start checks according to operator instructions
2. Operate and monitor the baking process	2.1 Start, operate and monitor the baking process for variation in operating conditions according work health and safety and operating procedures 2.2 Load product and bake product to specification according to food safety and operating requirements 2.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 2.4 Follow and apply workplace cleaning and environmental procedures
3. Shut down the baking process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements 3.4 Maintain workplace records in appropriate format

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 workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media

Skill	Description
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2029 Operate a baking process	FDFOP2029A Operate a baking process	Updated to meet Standards for Training Packages	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>

Assessment Requirements for FBPOPR2029 Operate a baking process

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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 operated a baking process on at least one occasion, including:

- accessing workplace information to identify baking process requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- confirming condition and quality of ingredients
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational, and rework bins are positioned
- confirming settings and parameters, including:
 - correct oven settings for baking time
 - oven zone temperatures
 - conveyor speed, loaders and dischargers
 - circulation and exhaust fans
 - water seals
 - burner controls and steam
 - heights, guides and air blowers
 - pre-blast conveyor

- starting, operating, monitoring and adjusting process equipment to achieve required outcomes, including monitoring control points and conducting inspections to confirm process remains within specification, including:
 - baking output, including quantities and product appearance (colour and sheen, uniformity of shape, weight and size, and moisture)
- confirming product is cleanly removed from the pan (depanning stage) and/or belt/band
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on baking equipment
- following isolation and lock-out/tag-out procedures to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- sorting, collecting, treating, recycling or disposing of waste, including clearing dust extractors
- completing workplace records
- maintaining work area to meet housekeeping standards
- setting up, starting up and monitoring the proofer, including time and temperature, humidity and position of the loading arm
- monitoring the proving process according to workplace procedures, including dough condition/surface and dough size and height
- setting up and operating finishing equipment according to workplace procedures, including setting topping application equipment, water sprays and splitters (monitoring typically involves checking appearance to confirm even coverage and/or finish to product specification)
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

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, including starch gelatinisation, the effect of variables (e.g. 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
- services required and action to take if services are not available
- the flow of the baking process and the effect of outputs on customer satisfaction and downstream processes, including packaging

- quality requirements of materials and the effect of variation on baking process performance
- 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/food safety risks associated with the baking process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls, including risks of spontaneous combustion and limitations of protective clothing and equipment used
- 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
- procedures and responsibility for reporting production and performance information
- 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.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and 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
 - cleaning procedures, materials and equipment.

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

Links

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