



Australian Government

FBPCON3008 Operate and monitor a starch moulding process

Release: 1

FBPCON3008 Operate and monitor a starch moulding 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, monitor, adjust and shut down gel-based products using a starch moulding process.

This unit applies to individuals who work as production workers and are responsible for the operation and monitoring of starch moulding equipment and processes in a confectionery production environment.

All work must be carried out to comply with workplace procedures, in accordance with 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

Confectionery (CON)

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 starch moulding equipment and process for operation	1.1 Confirm materials are available for product specification 1.2 Condition starch for moulding according to production specifications 1.3 Identify and confirm cleaning and maintenance requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Identify food safety requirements for the task and product 1.5 Identify safety requirements and wear appropriate personal protective equipment and ensure correct fit
2. Manufacture the gel product	2.1 Prepare starch mould to meet production requirements 2.2 Prepare and cook syrup with flavour and colour to meet product specification 2.3 Enter processing or operating parameters for depositing syrup according to equipment operating instructions 2.4 Deposit syrup to moulding equipment for conditioning 2.5 Check and adjust equipment performance according to operating parameters 2.6 Carry out pre-start checks according to operating procedures
3. Operate and monitor equipment	3.1 Start and operate the process safely according to operating instructions and safety procedures 3.2 Monitor starch moulding process to identify any variation in operating conditions, and make adjustments to ensure product meets specification 3.3 Monitor finishing equipment to identify variation in operating conditions, and make adjustments to ensure product meets specification 3.4 Take samples and confirm that specifications are met at each stage, ensuring excess starch is removed and items are finished with oil-based coating 3.5 Identify, rectify or report out-of-specification product or process outcomes according to workplace procedures 3.6 Maintain the work area according to workplace procedures 3.7 Maintain workplace records according to workplace procedures
4. Shut down the starch moulding process	4.1 Identify the appropriate shutdown procedure according to operating instructions 4.2 Shut down the process safely according to shutdown procedures 4.3 Identify and report maintenance requirements 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
Reading	Interpret information in recipes, equipment operational instructions and workplace procedures
Writing	- Accurately enter operational data into production equipment - Complete processing records using electronic, digital and/or paper-based formats
Numeracy	- Read and interpret equipment gauges and scales - Apply basic calculations to quantities in recipes for production volume and equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPCON3008 Operate and monitor a starch moulding process	FBPCON2009 Operate a starch moulding process	Unit code and title updated to better match complexity of task Minor changes to Performance Criteria for clarity Foundation Skills refined Performance Evidence clarified Minor changes to Knowledge Evidence and Assessment Conditions	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 FBPCON3008 Operate and monitor a starch moulding process

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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 starch moulding process to produce at least one batch of confectionery to meet product specifications, including:

- applying food safety procedures to work practices
- following safe work procedures
- 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 the starch moulding process, including an understanding of each stage of the cyclic process:
 - starch mould preparation
 - product preparation and conditioning
 - product depositing into conditioned starch
 - starch use and recovery cycle (reconditioning)
 - finishing
- basic operating principles of equipment, including main equipment components, status and purpose of guards, equipment operating capacities and applications, and 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 starch moulding and depositing process, and the effect of outputs on downstream processes
- quality requirements of starch moulds and materials for depositing, and effect of variation on starch moulding process performance and outputs, including the moisture absorption characteristics of starch and impact on the process
- quality characteristics required of process outputs

- operating requirements and 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 starch moulding process, including inspecting, measuring and testing as required by the process
- good manufacturing practices (GMP) relevant to work task
- inspection or test points (control points) in the process and the related procedures and recording requirements
- various finishing products, including oil and/or sugar-based products
- contamination and food safety risks associated with the starch moulding process, and related control measures
- health and safety hazards and controls relevant to starch moulding process
- requirements of different shutdowns as appropriate to the starch moulding 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
- procedures and responsibility for reporting production and performance information
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitisation procedures for starch moulding equipment
- procedures to record traceability of product.

Assessment Conditions

Assessment of the skills in this unit of competency 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 equipment
 - cooking, starch moulding and finishing equipment and related services
 - ingredients used in the preparation of starch moulding process
 - sampling schedules and equipment
 - cleaning materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on starch moulding equipment capacity and operating parameters
 - recipe/batch instructions, control points and processing parameters
 - 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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