



Australian Government

FBPCON2002 Operate a boiled confectionery process

Release: 1

FBPCON2002 Operate a boiled confectionery 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 a high boil and low boil confectionery process.

This unit applies to individuals who work under general supervision as production workers and are responsible for the operation and monitoring of confectionery boiling equipment in a confectionery production environment.

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

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 high and low boil equipment and process for operation	1.1 Confirm materials are available according to workplace procedure 1.2 Identify safety requirements and wear appropriate personal protective equipment ensuring correct fit 1.3 Select and combine ingredients for syrup in the sequence specified

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	by batch or recipe instructions 1.4 Identify and confirm cleaning and maintenance requirements and status of high and low boil process equipment 1.5 Enter processing and operating parameters according to equipment operating instructions 1.6 Check and adjust equipment performance according to operating parameters 1.7 Carry out pre-start checks according to operating procedures
2. Operate and monitor the high and low boil process	2.1 Deliver ingredients and additives in the required quantities and sequence to meet recipe specifications 2.2 Start and operate the process safely according to operating instructions and safety procedures 2.3 Monitor equipment to identify variation in operating conditions 2.4 Identify variation in equipment operation and report maintenance requirements according to workplace procedures 2.5 Heat, cook and cool product according to specification 2.6 Identify, rectify or report out-of-specification product or process outcomes according to workplace procedures 2.7 Maintain the work area according to workplace procedures 2.8 Maintain workplace records according to workplace procedures
3. Shut down the high and low boil process	3.1 Identify the appropriate shutdown procedure according to operating instructions 3.2 Shut down the process safely according to shutdown procedures 3.3 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
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Skill	Description
Reading	Interprets and comprehends information contained in recipes, equipment operational instructions and workplace procedures
Writing	Enters operational data into production equipment accurately
Numeracy	Locates, recognises and applies basic calculations for numerical information found in recipes and production equipment
Navigate the world of work	- Follows clear instructions within defined level of responsibility - Recognises organisational expectations and follows explicit protocols and procedures, seeking clarification when required
Interact with others	Follows instructions and procedures regarding what and how to communicate when reporting on confectionary production issues
Get the work done	- Follows clearly defined instructions and sequencing, and monitors own progress seeking assistance when necessary - Makes low-impact decisions around immediate clearly defined production tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPCON2002 Operate a boiled confectionery process	FDFCON2002A Operate a boiled confectionery process	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity	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 FBPCON2002 Operate a boiled confectionery 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 at least one high and low boiled confectionery process, including:

- checking the availability of materials
- selecting, fitting and using personal protective equipment
- conducting pre-start checks on machinery
- starting, operating, monitoring and adjusting process equipment to achieve required quality outcomes
- taking corrective action in response to typical faults and inconsistencies
- completing workplace records
- shutting down equipment.

Throughout the process, individuals must:

- apply food safety procedures to work practices
- follow work health and safety and equipment operating 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 the high/low boil process relating to the range of products to be produced, including:
 - ingredients used and their purpose
 - syrup making (super saturated solutions)
 - relationship between temperature and moisture content
 - the effect of vacuum on processing
 - reactions including crystallisation
 - process stages

- maturation and further processing requirements
- basic operating principles of equipment, including main equipment components, status and purpose of guards, the effect of vacuum on the cooking process and further processing, 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 high/low boil process and the effect of outputs on downstream processes
- quality requirements of materials used in low and high boil manufacture and effect of variation on process performance and outputs
- quality characteristics required of process outputs
- methods used to further process high and low boils, including basic forming or extruding and stamping, cooling, pulling and aerating as required by product range
- 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 high/low boil process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination and food safety risks associated with the high and low boil process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the high and low boil 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
- product and process changeover procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the high and low boil process, including waste and rework collection and handling procedures related to the process
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures, where relevant.

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

- process and related equipment and services, including mixing equipment, cookers and coolers
- ingredients used in the preparation of high/low boil product
- sampling schedules and test procedures and equipment
- cleaning materials, equipment and procedures
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - recipe/batch instructions
 - specifications, 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.

Links

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