



Australian Government

FBPBEV3001 Operate and monitor a wort production process

Release: 1

FBPBEV3001 Operate and monitor a wort production 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 wort production process.

This unit applies to individuals who are responsible for the operation and monitoring of wort production and associated equipment in a beer manufacturing 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

Beverages (BEV)

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 for work in processing area	1.1 Check production requirements against job specifications 1.2 Confirm availability of required materials according to production requirements 1.3 Confirm availability of services according to production 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 Wear appropriate personal protective clothing, and ensure correct fit
2. Prepare the wort production process for operation	2.1 Conduct pre-start checks of equipment according to operating procedures 2.2 Identify health, safety and food safety hazards and controls according to operating procedures 2.3 Set the wort production process to meet production requirements
3. Operate and monitor equipment	3.1 Start up the wort production system according to operating procedures 3.2 Monitor control points to confirm performance is maintained within specification 3.3 Undertake simple tests according to operating procedures 3.4 Ensure system and sub-system outputs meet specification 3.5 Monitor equipment to confirm optimal operations 3.6 Identify, rectify and/or report out-of-specification wort, process and equipment performance 3.7 Record production details in line with workplace and regulatory requirements
4. Shut down the wort production system	4.1 Identify and implement the appropriate shutdown procedure 4.2 Clean and maintain equipment according to workplace procedures 4.3 Collect, treat and dispose of or recycle waste generated by both the process and cleaning procedures according to environmental 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 safety information and workplace and standard operating procedures

Skill	Description
	• Interpret production requirements • Interact with digital screens
Writing	• Complete batch records to meet workplace and regulatory requirements using electronic, digital and/or paper-based formats
Numeracy	• Monitor process control indicators and data • Monitor supply and flow of materials to and from the process • Read and interpret gauges and scales • Measure volume of wort (L and hL)

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPBEV3001 Operate and monitor a wort production process	FBPOPR2061 Operate a wort production process	Unit sector code updated to better match work task Code updated to better match complexity of work task Prerequisite removed Changes to Elements and Performance Criteria to clarify task 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 FBPBEV3001 Operate and monitor a wort production 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 and monitored wort production equipment to produce at least one batch of wort to meet product specifications, including:

- following safe work procedures
- monitoring critical control points
- addressing routine processing issues.

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 principles of the wort production process
- relationship between the wort production process and the fermentation process
- stages and changes that occur during wort production, including milling, mashing and lautering, separation, boiling and cooling
- equipment used in the production of wort
- methods to transfer fluids and materials between vessels
- purpose of malt, hops, water, adjuncts and the preparation procedure for each
- purpose of the addition of processing aids and other ingredients
- good manufacturing practices (GMP) relevant to work task
- correct procedures for handling dangerous goods, including dust explosion hazards and control procedures relevant to wort production
- quality characteristics to be achieved for the wort production process
- wort process specifications, procedures and operating parameters
- the importance of temperature, temperature control systems and temperature intervals during wort production
- purpose of wort production equipment and instrumentation components
- significance and methods of monitoring control points within the wort production process

- sampling methods and typical tests undertaken
- common causes of variation, and corrective action required
- common microbiological, physical, chemical and allergen hazards related to beer production, 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, including the purpose and limitations of protective clothing and equipment relevant to the work process
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures
- cleaning requirements associated with changeovers and types of shutdowns
- procedures for reporting problems relevant to the wort production process
- cleaning and sanitation procedures
- traceability procedures.

Assessment Conditions

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

- physical conditions:
 - a brewery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - wort production equipment and services
 - raw materials and adjuncts required for product
 - cleaning equipment and materials
- specifications:
 - work procedures, including advice on safe work practices, food safety and environmental requirements
 - batch instructions, control points and production parameters
 - sampling and testing schedules
 - recording requirements.

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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