



Australian Government

FBPGRA2005 Operate a purification process

Release: 1

FBPGRA2005 Operate a purification 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 safety knowledge required to set up, operate, adjust and shut down a separation and grading process to remove particles of bran, with or without endosperm or germ attached, from the stock flow.

This unit applies to individuals who work in a stockfeed production environment. It typically targets the production worker responsible for applying basic operating principles to the operation and monitoring of stockfeed purification equipment and processes.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety 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

Grain processing (GRA)

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 purification equipment and process for operation	1.1 Confirm materials are available according to operating requirements 1.2 Identify and ensure cleaning and maintenance requirements have been met according to food safety 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>
	1.3 Select, fit and use personal protective equipment 1.4 Fit and adjust machine components and related attachments according to operating requirements 1.5 Enter processing or operating parameters to meet safety and production requirements 1.6 Check and adjust equipment to ensure optimum performance 1.7 Carry out pre-start checks according to operator instructions
2. Operate and monitor the purification process	2.1 Start and operate the process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Monitor the process to confirm that particle size and quantity of stock meets specifications 2.5 Remove fine bran from the semolina and return the bran product with endosperm attached to the purification process or scratch rolls for further processing 2.6 Identify, rectify or report out-of-specification product and process outcomes according to workplace procedures 2.7 Maintain the work area according to work health and safety and operating procedures 2.8 Maintain workplace records according to workplace procedures
3. Shut down the purification 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 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 directions for the safe operation of equipment
Writing	- Record product information on paper-based and electronic media - Record equipment failure on paper-based and electronic media
Numeracy	Use correct ratios when adding and mixing ingredients, including any micronutrients and additives
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand tasks and responsibilities required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Use oral communication skills as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor - Communicate and report operational and safety information to relevant personnel
Get the work done	- Maintain a clean and hazard-free work area - Maintain hygiene standards and wear required personal protective equipment - Identify faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems - Maintain quality requirements for the sanitisation and use of equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA2005 Operate a purification process	FDFGR2005A Operate a purification 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 FBPGRA2005 Operate a purification process

Modification History

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

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for purification
- selected, fitted and used personal protective equipment
- started, operated, monitored and adjusted process equipment to remove particles of bran, with or without endosperm or germ attached, from the stock flow to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records as required
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

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 purification process
- basic operating principles of equipment, including:
 - 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 purification process and the effect of outputs on downstream flour milling processes
- quality characteristics to be achieved by the purification process

- quality requirements of materials and effect of variation on purification process performance
- 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
 - early warning signs of potential problems
- methods used to monitor the purification process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the purification process and the related procedures and recording requirements
- contamination and food safety risks associated with the purification 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 purification process and workplace production requirements, including:
 - emergency and routine shutdowns
 - 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
- environmental issues and controls relevant to the purification process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for operating a purification process
- cleaning and sanitation procedures for operating a purification process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a grain processing workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment required to set up, operate, adjust and shut down a separation and grading process to remove particles of bran
 - production schedule and batch instructions
 - purification process and related equipment and services
 - materials to be purified
 - cleaning procedures, materials and equipment as required
- specifications:

- work procedures, including advice on safe work practices, food safety, quality and environmental requirements.

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

Links

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