

**Modification history**

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

| FBPGRA2005               | Operate a purification process   |
|--------------------------|--|
| <b>Application</b>       | <p>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.</p> <p>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.</p> <p>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.</p> <p>No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.</p> |
| <b>Prerequisite Unit</b> | Nil  |
| <b>Unit Sector</b>       | Grain processing (GRA)   |

| 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<br>1.2 Identify and ensure cleaning and maintenance requirements have been met according to food safety requirements<br>1.3 Select, fit and use personal protective equipment<br>1.4 Fit and adjust machine components and related attachments according to operating requirements<br>1.5 Enter processing or operating parameters to meet safety and production requirements<br>1.6 Check and adjust equipment to ensure optimum performance<br>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<br>2.2 Monitor equipment to identify variation in operating conditions<br>2.3 Identify variation in equipment operation and report maintenance requirements<br>2.4 Monitor the process to confirm that particle size and quantity of stock meets specifications<br>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<br>2.6 Identify, rectify or report out-of-specification product and process outcomes according to workplace procedures<br>2.7 Maintain the work area according to work health and safety and operating procedures<br>2.8 Maintain workplace records according to workplace procedures |

| <b>Elements</b>                                  | <b>Performance Criteria</b>   |
|--|---|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>  |
| 3. Shut down the purification process            | 3.1 Identify the appropriate shutdown procedure<br>3.2 Shut down the process safely according to operating procedures<br>3.3 Identify and report maintenance requirements according to workplace procedures |

| <b>Foundation Skills</b>   |   |
|--|---|
| <i>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.</i> |   |
| <b>Skill</b>   | <b>Description</b>  |
| Reading  | <ul style="list-style-type: none"> <li>Interpret directions for the safe operation of equipment</li> </ul>  |
| Writing  | <ul style="list-style-type: none"> <li>Record product information on paper-based and electronic media</li> <li>Record equipment failure on paper-based and electronic media</li> </ul>  |
| Numeracy   | <ul style="list-style-type: none"> <li>Use correct ratios when adding and mixing ingredients, including any micronutrients and additives</li> </ul>   |
| Navigate the world of work   | <ul style="list-style-type: none"> <li>Apply workplace procedures to own role and responsibilities</li> <li>Understand tasks and responsibilities required for performing own role in the workplace</li> <li>Ask questions to clarify understanding or seek further information</li> </ul>  |
| Interact with others   | <ul style="list-style-type: none"> <li>Use oral communication skills as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor</li> <li>Communicate and report operational and safety information to relevant personnel</li> </ul>   |
| Get the work done  | <ul style="list-style-type: none"> <li>Maintain a clean and hazard-free work area</li> <li>Maintain hygiene standards and wear required personal protective equipment</li> <li>Identify faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems</li> <li>Maintain quality requirements for the sanitisation and use of equipment</li> </ul> |

| <b>Unit Mapping Information</b>              |  |   |                           |
|--|--|---|---------------------------|
| <b>Code and title current version</b>        | <b>Code and title previous version</b>       | <b>Comments</b>                                 | <b>Equivalence status</b> |
| FBPGRA2005<br>Operate a purification process | FDFGR2005A<br>Operate a purification process | Updated to meet Standards for Training Packages | Equivalent unit           |

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| <b>Links</b> | Companion Volumes, including Implementation Guides, are available at VETNet:<br><a href="https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4">https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4</a> |
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| <b>TITLE</b>  | <b>Assessment requirements for FBPGRA2005 Operate a purification process</b> |
| <b>Performance Evidence</b>   |  |
| <p>An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.</p> <p>There must be evidence that, on at least one occasion, the individual has:</p> <ul style="list-style-type: none"> <li>• conducted pre-start checks on machinery used for purification</li> <li>• selected, fitted and used personal protective equipment</li> <li>• 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</li> <li>• taken corrective action in response to typical faults and inconsistencies</li> <li>• completed workplace records as required</li> <li>• applied safe work practices and identified work health and safety hazards and controls</li> <li>• safely shut down equipment</li> <li>• applied food safety procedures to work practices.</li> </ul>  |  |
| <b>Knowledge Evidence</b>   |  |
| <p>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:</p> <ul style="list-style-type: none"> <li>• purpose and basic principles of the purification process</li> <li>• basic operating principles of equipment, including: <ul style="list-style-type: none"> <li>• main equipment components</li> <li>• status and purpose of guards</li> <li>• equipment operating capacities and applications</li> <li>• the purpose and location of sensors and related feedback instrumentation</li> </ul> </li> <li>• services required and action to take if services are not available</li> <li>• the flow of the purification process and the effect of outputs on downstream flour milling processes</li> <li>• quality characteristics to be achieved by the purification process</li> <li>• quality requirements of materials and effect of variation on purification process performance</li> <li>• operating requirements and parameters and corrective action required where operation is outside specified operating parameters</li> <li>• typical equipment faults and related causes, including: <ul style="list-style-type: none"> <li>• signs and symptoms of faulty equipment</li> <li>• early warning signs of potential problems</li> </ul> </li> <li>• methods used to monitor the purification process, including inspecting, measuring and testing as required by the process</li> <li>• inspection or test points (control points) in the purification process and the related procedures and recording requirements</li> <li>• contamination and food safety risks associated with the purification process and related control measures</li> <li>• common causes of variation and corrective action required</li> <li>• work health and safety hazards and controls</li> <li>• requirements of different shutdowns as appropriate to the purification process and workplace production requirements, including: <ul style="list-style-type: none"> <li>• emergency and routine shutdowns</li> <li>• procedures to follow in the event of a power outage</li> </ul> </li> <li>• isolation, lock out and tag out procedures and responsibilities</li> <li>• procedures and responsibility for reporting production and performance information</li> <li>• environmental issues and controls relevant to the purification process, including waste/rework collection and handling procedures related to the process</li> <li>• basic operating principles of process control, including the relationship between control panels and systems and the physical equipment</li> <li>• routine maintenance procedures for operating a purification process</li> <li>• cleaning and sanitation procedures for operating a purification process.</li> </ul> |  |

| <b>Assessment Conditions</b>  |   |
|---|---|
| <p>Assessment of skills must take place under the following conditions:</p> <ul style="list-style-type: none"><li>• physical conditions:<ul style="list-style-type: none"><li>• a grain processing workplace or an environment that accurately represents workplace conditions</li></ul></li><li>• resources, equipment and materials:<ul style="list-style-type: none"><li>• personal protective equipment required to set up, operate, adjust and shut down a separation and grading process to remove particles of bran</li><li>• production schedule and batch instructions</li><li>• purification process and related equipment and services</li><li>• materials to be purified</li><li>• cleaning procedures, materials and equipment as required</li></ul></li><li>• specifications:<ul style="list-style-type: none"><li>• work procedures, including advice on safe work practices, food safety, quality and environmental requirements.</li></ul></li></ul> <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p> |   |
| <b>Links</b>  | Companion Volumes, including Implementation Guides, are available at VETNet:<br><a href="https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4">https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4</a> |