Modification history

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| Release | Comments |
| Release 1 | This version released with FBP Food, Beverage and Pharmaceutical Training Package version 6.0 |

| FBPGRA3XX9 | Monitor a purification process |
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| 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 grain processing environment, under the direction of the Head Miller. 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. |
| Prerequisite Unit | Nil |
| Unit Sector | Grain processing (GRA) |

| Elements | Performance Criteria |
| --- | --- |
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Prepare the purification equipment and process for operation | 1.1 Confirm materials are available according to operating requirements  1.2 Identify and confirm cleaning and maintenance requirements have been met according to food safety requirements  1.3 Select, fit and use personal protective equipment and clothing  1.4 Fit and adjust machine components and related attachments according to operating requirements  1.5 Check processing or operating parameters to meet safety and production requirements  1.6 Carry out pre-start checks according to operator instructions |
| 2. Operate and monitor equipment | 2.1 Start and operate the process according to safe work procedures  2.2 Monitor equipment and services to ensure optimal operations  2.3 Identify any variation in equipment operation and troubleshoot to identify solution  2.4 Take and test samples to confirm that grain is separated in line with 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 safe work and food safety procedures  2.8 Maintain workplace records including traceability and biosecurity 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  3.4 Ensure waste is disposed of in line with environmental requirements |

| 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. | |
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| Skill | Description |
| Reading | * Interpret directions for the safe operation of equipment |
| Writing | * Record product and processing information using digital and/or paper-based formats |
| Numeracy | * Measure product and ingredients using weight (g, kg, T) to two decimal points * Monitor supply and flow of materials to and from the break roll process * Accurately interpret readings on scales and gauges |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPGRA3XX9 Monitor a purification process | FDFGRA2005 Operate a purification process | Unit title and code updated to better match work task  Minor changes to Performance Criteria to clarify intent  Foundation skills refined  Performance Evidence clarified  Minor changes to Knowledge Evidence and Assessment Conditions | Equivalent unit |

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

| TITLE | Assessment requirements for FBPGRA3XX9 Monitor a purification 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 individual has monitored a break roll process to process at least one batch of grain to product specification, including:   * applying safe work practices * applying food safety procedures to work practices * ensured particles of bran are removed, with or without endosperm or germ attached, from the stock flow to achieve required quality outcomes * taking corrective action in response to typical faults and inconsistencies. | |

| Knowledge Evidence |
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| 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 * good manufacturing practices (GMP) relevant to work task * 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/cross contamination and food safety risks associated with the purification process and related control measures, including microbiological, physical, chemical and allergen/cross contact allergen risks * common causes of variation and corrective action required * 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 workspace and equipment * procedures to track traceability of product * procedures to ensure biosecurity requirements are met. |

| Assessment Conditions |
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| 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: * product to be purified * personal protective clothing and equipment * purification process equipment and related services * cleaning materials and equipment * specifications: * production schedule and batch instructions * 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. |

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