



Australian Government

FBPGRA3015 Implement a rice whitening process

Release: 1

FBPGRA3015 Implement a rice whitening process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to take brown rice and convert it to white rice through a friction abrasive whitening process.

The unit applies to individuals who are production workers in the rice processing environment and are responsible for the rice whitening process. They work under minimal supervision and take responsibility for their own work and that of others in their team.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation 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 for safe work in a rice whitening process	1.1 Select and fit personal safety protection equipment according to workplace safety procedures 1.2 Select and fit hygiene protection equipment according to workplace food safety hygiene procedures

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 Perform personal hygiene cleaning procedures 1.4 Receive and interpret instructions on rice whitening activity and performance requirements
2. Prepare the rice whitening equipment for operation	2.1 Ensure raw materials are available to meet operating requirements 2.2 Identify and confirm the status of cleaning and maintenance requirements 2.3 Fit and adjust machine components and related attachments according to operating requirements 2.4 Enter processing/operating parameters to meet safety and production specifications 2.5 Check, adjust and conduct routine maintenance on equipment to ensure required performance 2.6 Conduct pre-start checks according to workplace instructions
3. Operate and monitor the rice whitening process	3.1 Start up and operate process according to workplace procedures 3.2 Monitor equipment to identify variation in operating conditions, and adjust according to product specifications 3.3 Identify variation in equipment operation, and repair or report maintenance requirements according to workplace reporting procedures 3.4 Implement required safety procedures 3.5 Collect samples and test to ensure rice meets specification 3.6 Identify, rectify or report out-of-specification product/process to maintain process within specification 3.7 Ensure workplace meets housekeeping standards 3.8 Maintain records according to workplace requirements
4. Shut down the rice whitening process	4.1 Identify appropriate shutdown procedure 4.2 Shut down the process safely according to workplace procedures 4.3 Identify maintenance requirements, and report 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.

Skills	Description
Reading	Reads and interprets instructions, operating procedures, specifications, and other documentation from a variety of sources, and consolidates information to determine rice production actions and activity
Writing	Accurately records and completes organisational documentation using clear language, correct spelling, grammar and terminology when reporting and maintaining rice processing records
Numeracy	- Interprets and manipulates numerical information for volumes, weights and measures - Performs mathematical calculations to check, interpret and confirm results of system tests
Oral communication	Effectively participates in verbal exchanges using collaborative and inclusive techniques, including active listening and questioning and reading of verbal and non-verbal signals to convey and clarify information
Navigate the world of work	- Takes full responsibility for following policies, procedures and industry standards - Identifies and acts on issues that contravene relevant policies, procedures and legal requirements
Interact with others	Cooperates with others and contributes to work practices where joint outcomes are expected and deadlines are to be met
Get the work done	- Takes responsibility for planning, sequencing and prioritising tasks and workload for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Contributes to continuous improvement of current work practices by applying basic principles of analytical and lateral thinking - Uses the main features and functions of digital tools to complete work tasks and access information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
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Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA3015 Implement a rice whitening process	ZRGRPRW2A Operate a rice whitening process	Updated to meet Standards for Training Packages Change of coding to reflect revised AQF level Changes to the title, elements and performance criteria	No 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 FBPGRA3015 Implement a rice whitening 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 implemented a rice whitening process for at least three rice grain varieties, including:

- accessed and interpreted workplace information for rice whitening process requirements
- confirmed supply of necessary materials and services
- conducted pre-start checks, started, operated, monitored and adjusted process equipment to achieve required outcomes
- selected, fitted and used personal protective equipment
- followed workplace health and safety procedures
- monitored control points and conducted inspections to confirm process remains within specification
- selected, fitted and used personal protective equipment and followed workplace health and safety procedures
- taken corrective action and adjustments in response to out-of-specification results
- monitored supply and flow of materials to and from the rice whitening process
- diagnosed common faults, and rectified or reported equipment failure within level of responsibility and according to workplace procedures
- completed workplace records according to procedures
- maintained work area to meet housekeeping standards.

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 rice whitening process, including:
 - visual identification of short, medium and long grain rice varieties used within the organisation
 - process flow and the effect of rice whitening process on the end product

- degree of whitening required and relation to number of passes
- basic operating principles of equipment, including:
 - balance bins
 - abrasive whitener
 - friction whitener
 - vertical or horizontal whiteners/water polishers
 - testing equipment
- an operational understanding of main equipment components, including:
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
 - services required and action to take if services are not available
 - inspection of equipment condition to identify any signs of wear, including identifying holes in whitening screens, identifying worn scrolls, and making appropriate adjustments
 - appropriate settings and/or related parameters, including whitener weights adjustments to meet specifications
 - isolation or lock-out procedures
 - confirming that equipment is clean and correctly configured for processing requirements
 - confirming that sensors and controls are correctly positioned
 - scheduled maintenance requirements
 - product/process changeover procedures and responsibilities
- quality characteristics, including:
 - common causes of product variation, and corrective action, including moisture levels
 - requirements of materials and effect of variation in raw materials on the rice whitening preparation process
 - sampling and testing associated with process monitoring and control
 - equipment operating requirements, parameters and corrective action required where operation is outside specified parameters, including:
 - out-of-specifications troubleshooting procedures
 - typical equipment faults and related causes, including recognition of signs and symptoms of faulty equipment and early warning signs of potential problems
 - requirements of different shutdowns, including emergency and routine weekly shutdowns, product changeover, and procedures to follow in the event of a power outage
 - requirements of different start-up procedures following shutdown
- methods used to monitor the rice whitening process, including:
 - inspecting
 - measuring
 - testing, including moisture, non-metallic foreign materials, metallic foreign materials

- contamination/food safety risks associated with the process, and related control measures
- cleaning and sanitation procedures
- work health and safety hazards and controls, including awareness of the limitations of protective clothing and equipment relevant to the work process
- 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 process, including waste/rework collection and handling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - an industrial rice processing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - industrial paddy grain cleaning machine that has the capacity to process at least four tonnes per hour
 - paddy destoner that has the capacity to process at least four tonnes per hour
 - rice to be whitened
 - cleaning materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - equipment operating instructions and manuals
 - production schedule
 - customer specifications, control points and processing parameters
 - sampling schedules and test procedures and equipment as required
 - documentation and recording requirements and procedures
 - cleaning procedures.

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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