



Australian Government

FBPGRA3024 Operate and monitor grain cleaning

Release: 1

FBPGRA3024 Operate and monitor grain cleaning

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, monitor and shut down a cleaning process to screen impurities from the grist prior to, and following, the conditioning process.

This unit applies to individuals who work in a grain processing environment under the direction of the miller or head miller, to produce food or feed. It typically targets the production worker responsible for applying basic operating principles to the operation and monitoring of grain cleaning equipment and processes.

All work must be carried out to comply with workplace procedures according to 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

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 grain cleaning equipment and process for operation	1.1 Confirm materials are available to meet product specification requirements 1.2 Carry out pre-start checks according to operator instructions

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 and clothing as required of workplace policies 1.4 Identify and confirm work area is clean according to food safety standards, and equipment is not locked out 1.5 Check processing or operating parameters to meet safety and production requirements 1.6 Set up the bin system according to operating requirements
2. Operate and monitor equipment	2.1 Start and operate the process according to safe operating procedures 2.2 Identify variation in equipment operation, and report to miller 2.3 Take and check samples to ensure impurities are screened from grist, and report any variation 2.4 Identify and report out-of-specification product and process outcomes 2.5 Store cleaned grain according to food safety procedures 2.6 Maintain the work area according to safe work and food safety procedures 2.7 Maintain workplace records according to workplace procedures
3. Shut down the grain cleaning 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 safely 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.

Skill	Description
Reading	Interpret directions for the safe operation of equipment

Skill	Description
	Operate equipment using digital interface
Writing	Complete processing records using digital and/or paper-based formats
Numeracy	- Measure product using weight (kg, T) and volume (L, hL), to two decimal points - Use percentages (%) as they apply to mixes of grain - Interpret and monitor readings on scales and gauges - Monitor tank levels

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA3024 Operate and monitor grain cleaning	FBPGRA2004 Operate a grain cleaning 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

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 FBPGRA3024 Operate and monitor grain cleaning

Modification History

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

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 a grain cleaning process on at least one occasion, including:

- applying safe work practices
- applying food safety procedures to work practices
- checking grain is adequately cleaned to meet specifications, following head miller's instructions
- reporting inconsistencies or variations.

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 grain cleaning, size, density, resistance to air current, friction
- basic operating principles of equipment, including:
 - main equipment components, including where and how adjustments can be made
 - 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 grain cleaning process and the basic effect of outputs on downstream processes
- quality characteristics to be achieved by the grain cleaning process
- quality requirements of materials, and effect of variation on grain cleaning process performance

- the basics of how and why various kinds of wheat are blended to make grist
- methods used to monitor grain cleaning, including:
 - visual inspections to ensure product meets specification and impurities are removed
 - sieving
 - checking screenings to ensure grain is not wasted
- basic contamination/cross-contamination and food safety risks associated with the grain cleaning process, and related control measures
- common causes of poor or inadequate cleaning, including:
 - poor adjustment of equipment
 - equipment not suited to task
 - equipment not well maintained
 - inadequate aspiration for correct machine function
 - inadequate cleaning/clearing of equipment
- health and safety hazards and controls
- requirements of different shutdowns as appropriate to the grain cleaning process and workplace production requirements, including:
 - routine cleaning system shutdown
 - unexpected production stop
 - emergency 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, including waste and rework collection and handling procedures
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for grain cleaning equipment
- cleaning and sanitisation procedures for workspace and equipment
- procedures to track traceability of product
- procedures to ensure biosecurity requirements are met.

Assessment Conditions

Assessment of the skills in this unit of competency 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 clothing
 - grain cleaning equipment and related services
 - grist mixed for cleaning

- production schedule
- cleaning materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - basic information on equipment capacity and operating parameters.
- relationships:
 - supervisor/head miller.

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>