

**Modification history**

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

FBPGRA3XX3	Operate and monitor a grain cleaning process
<b>Application</b>	<p>This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a cleaning process to screen impurities from the grist prior to the conditioning process.</p> <p>The unit applies to individuals who work in a grain processing environment. It typically targets the production worker responsible for applying basic operating principles to the operation and monitoring of grain cleaning equipment and processes for flour or stockfeed.</p> <p>All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation 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 grain cleaning equipment and process for operation	1.1 Confirm materials are available to meet product specification requirements 1.2 Select, fit and use personal protective equipment and clothing 1.3 Identify and confirm cleaning and maintenance requirements have been met according to health, safety and food safety requirements 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 Set up the bin system according to operating requirements 1.7 Carry out pre-start checks according to operator instructions
2. Operate and monitor equipment	2.1 Start and operate the process according to safe operating procedures 2.2 Monitor equipment to ensure optimal operations 2.3 Take and test samples to ensure impurities are screened from grist 2.4 Identify variation in equipment operation, troubleshoot to identify solution and adjust 2.5 Monitor the product to confirm that cleaned grain meets specifications 2.6 Identify, rectify or report out-of-specification product and process outcomes 2.7 Store cleaned grain according to food safety procedures 2.8 Maintain the work area according to safe work and food safety procedures 2.9 Maintain workplace records including traceability and biosecurity 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

<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> <li>Operate equipment using digital interface</li> </ul>
Writing	<ul style="list-style-type: none"> <li>Complete processing records using digital and/or paper-based formats</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>Measure product and ingredients using weight (g, kg, T) and volume (ml, L), to two decimal points</li> <li>Interpret and monitor readings on scales and gauges</li> <li>Monitor tank levels</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>
FBPGRA3XX3 Operate and monitor a grain cleaning process	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 unit

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

<b>TITLE</b>	<b>Assessment requirements for FBPGRA3XX3 Operate and monitor a grain cleaning 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 the individual has operated and monitored a grain cleaning process to clean at least one batch of grain to meet product specifications, including:</p> <ul style="list-style-type: none"> <li>• applying safe work practices</li> <li>• applying food safety procedures to work practices</li> <li>• checking quality of cleaned grain</li> <li>• taking corrective action in response to typical faults and inconsistencies.</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 grain cleaning 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>• good manufacturing practices (GMP) relevant to work task</li> <li>• the flow of the grain cleaning process and the effect of outputs on downstream processes</li> <li>• quality characteristics to be achieved by the grain cleaning process</li> <li>• quality requirements of materials and effect of variation on grain cleaning process performance</li> <li>• how and why various kinds of wheat are blended to make grist</li> <li>• purpose of the break rolls</li> <li>• how and why the separation of endosperm takes place</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 grain cleaning process, including inspecting, measuring and testing</li> <li>• inspection or test points (control points) in the grain cleaning process and the related procedures and recording requirements</li> <li>• contamination/cross contamination and food safety risks associated with the grain cleaning process and related control measures, including microbiological, physical, chemical and allergen/cross contact allergen risks</li> <li>• common causes of variation and corrective action required</li> <li>• health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process</li> <li>• requirements of different shutdowns as appropriate to the grain cleaning 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 grain cleaning process, including waste and rework collection and handling procedures related to the process</li> <li>• basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment</li> <li>• routine maintenance procedures for grain cleaning equipment</li> <li>• cleaning and sanitation procedures for work space and equipment</li> <li>• procedures to track traceability of product</li> </ul>	

<b>Knowledge Evidence</b>	
<ul style="list-style-type: none"> <li>procedures to ensure biosecurity requirements are met.</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 and clothing</li> <li>grain cleaning equipment and related services</li> <li>grain to be cleaned</li> <li>production schedule and batch instructions</li> <li>cleaning materials and equipment</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> <li>information on equipment capacity and operating parameters.</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>	<p>Companion Volumes, including Implementation Guides, are available at VETNet:  <a href="https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4">https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4</a></p>