

Modification history

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 5.0.

FBPGRA3XX2	Operate and monitor a grain conditioning process
Application	<p>This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a process to condition grain by adding water or additives to create a moisture level required for the separation and reduction processes.</p> <p>This unit applies to individuals who work in a grain processing environment. It typically targets the production worker responsible for applying operating principles to the operation and monitoring of grain conditioning equipment and processes for flour or animal feed.</p> <p>All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation and that apply to the workplace.</p> <p>No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
Prerequisite Unit	Nil
Unit Sector	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 conditioning 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 procedures 1.4 Fit and adjust machine components and related attachments according to operating requirements 1.5 Enter processing or operating parameters to meet safety and production requirements 1.6 Conduct 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 and conditioned product meets grist moisture specifications 2.3 Identify any variation in equipment operation and troubleshoot to identify solution 2.4 Adjust equipment to ensure optimum performance 2.6 Identify, rectify or report out-of-specification product or process outcomes 2.5 Store conditioned product according to food safety 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 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	
<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>	
Skill	Description
Reading	<ul style="list-style-type: none"> • Interpret grain conditioning processing requirements • Operate equipment using digital interface
Writing	<ul style="list-style-type: none"> • Record product and processing information on electronic, digital and/or paper-based formats
Numeracy	<ul style="list-style-type: none"> • Measure product and ingredients using weight (g, kg, T) and volume (ml, L), to two decimal points • Calculate water addition to suit machine and wheat type • Read and interpret measurements on moisture meter • Accurately interpret readings on scales and gauges

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA3XX2 Operate and monitor a grain conditioning process	FBPGRA2003 Operate a grain conditioning 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

Links	Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4
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TITLE	Assessment requirements for FBPGRA3XX2 Operate and monitor a grain conditioning process
Performance Evidence	
<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 conditioning process to condition at least one batch of grain to product specification, including:</p> <ul style="list-style-type: none"> • applying safe work practices • applying food safety procedures to work practices • checking moisture content of grist • taking corrective action in response to typical faults and inconsistencies. 	

Knowledge Evidence	
<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"> • purpose and basic principles of the grain conditioning process • basic operating principles of equipment, including: <ul style="list-style-type: none"> • 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 conditioning process and the effect of outputs on downstream flour milling processes • quality characteristics to be achieved by the conditioning process • quality requirements of materials and effect of variation on conditioning process performance • types of grain and their qualities • typical additives used in grain conditioning • operating requirements and parameters and corrective action required where operation is outside specified operating parameters • typical equipment faults and related causes, including: <ul style="list-style-type: none"> • signs and symptoms of faulty equipment • early warning signs of potential problems • methods used to monitor the conditioning process, including inspecting, measuring and testing as required by the process • inspection or test points (control points) in the conditioning process and the related procedures and recording requirements • contamination/cross contamination and food safety risks associated with the conditioning process and related control measures, including potential risks associated with out-of-specification lying times of conditioned grain • microbiological considerations in conditioning grain • common causes of variation and corrective action required • health and safety hazards and controls • requirements of different shutdowns as appropriate to the conditioning process and workplace production requirements, including: <ul style="list-style-type: none"> • 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 conditioning process, including waste and rework collection and handling procedures related to the process • 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 conditioning equipment • cleaning and sanitation procedures for work space and equipment • procedures to track traceability of product 	

Knowledge Evidence	
<ul style="list-style-type: none"> procedures to ensure biosecurity requirements are met. 	
Assessment Conditions	
<p>Assessment of skills must take place under the following conditions:</p> <ul style="list-style-type: none"> physical conditions: <ul style="list-style-type: none"> a grain processing workplace or an environment that accurately represents workplace conditions resources, equipment and materials: <ul style="list-style-type: none"> grain conditioning equipment and services personal protective clothing and equipment grain for conditioning grain conditioning additives production schedule and batch instructions specifications: <ul style="list-style-type: none"> grain conditioning specification work procedures, including advice on safe work practices, food safety, quality and environmental requirements information on equipment capacity and operating parameters. <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p>	
Links	<p>Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4</p>