



Australian Government

FBPSUG2014 Operate a low grade fugal station

Release: 1

FBPSUG2014 Operate a low grade fugal station

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 2.0.

Application

This unit of competency describes the skills and knowledge required to operate the low-grade fugal process from the re-heater to the magma pump and molasses cooler.

The unit applies to individuals who work under supervision in the sugar milling industry.

All work must be carried out to comply with workplace procedures according to state/territory health and safety regulations, legislation and standards 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

Sugar milling (SUG)

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 low grade fugal station for operation	1.1 Confirm massecuite is available to meet production requirements 1.2 Confirm services are available and ready for operation 1.3 Check equipment in readiness for use according to operating specifications 1.4 Select, fit and use personal protective equipment according to workplace safety 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>
	1.5 Set the low grade fugal process to meet production requirements
2. Operate and monitor low grade fugal station	2.1 Start and operate the low grade fugal station according to operating procedures 2.2 Confirm process performance is maintained within specification 2.3 Ensure C sugar and C molasses meet specification 2.4 Monitor equipment to confirm operating condition 2.5 Identify, rectify or report product, process and equipment non-conformance according to workplace procedures
3. Hand over the low grade fugal station	3.1 Maintain workplace records according to workplace requirements 3.2 Carry out shift changeover according to workplace procedures 3.3 Ensure low grade fugal station operators are aware of system and related equipment status at completion of handover
4. Shut down the low grade fugal station	4.1 Identify the appropriate shutdown procedure for operational and long-term shutdown conditions 4.2 Safely shut down the low grade fugal system according to operating procedures 4.3 Prepare the low grade fugal system for storage in shutdown mode 4.4 Identify and report operational maintenance requirements 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.

Skill	Description
Reading	Interpret information in workplace and standard operating procedures
Numeracy	- Monitor and interpret production and process control indicators and data - Check operation or calibration of measuring instrumentation
Navigate the world of	Apply workplace procedures to own role and responsibilities

Skill	Description
work	
Interact with others	• Apply communication practices and protocols relevant to own role
Get the work done	• Complete tasks in required sequence • Apply decision-making processes to respond to routine performance abnormalities

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPSUG2014 Operate a low grade fugal station	FDFSUG214A Operate a low grade fugal station	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume Implementation Guides are found in VETNet: -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPSUG2014 Operate a low grade fugal station

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 2.0.

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 a low grade fugal station in line with workplace contexts and demonstrated each of the following points at least once:

- confirmed availability of equipment, services and massecuite to meet production requirements
- selected, fitted and used personal protective equipment (PPE)
- conducted pre-start checks and followed start-up procedure
- started up and operated in both automatic and manual modes
- safely operated, monitored and adjusted the process and equipment from the re-heater to the magma pump and molasses cooler within required parameters
- controlled station throughput to meet factory flows
- performed an operational shutdown according to workplace procedure
- conducted shift handover according to workplace procedure
- taken corrective action in response to typical operating faults and product and process non-conformance.

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 low grade fugal operation, including C molasses cooling and storage, and operating efficiencies for low grade fugals
- the effect of C molasses dilution and temperature on C massecuite viscosity
- the effect of C massecuite conditioning on low grade fugal performance
- factors that affect throughput and recovery, including the relationship between crystalliser throughput, magma stock and remelt rate
- equipment purpose and operating principles of low grade fugal equipment
- services used for low grade fugal process

- significance and method of monitoring control points within the process
- key health and safety requirements when operating a low grade fugal process:
 - hazards and associated control measures
 - correct use of PPE
 - procedures for responding to emergency situations
 - lock-out and tag-out procedures
- requirements of operational and long-term shutdown conditions
- procedures and responsibility for reporting problems relating to the low grade fugal process
- environmental and waste handling requirements and procedures relevant to the low grade fugal process
- recording requirements and procedures relevant to low grade fugal process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a sugar milling workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - PPE
 - low grade fugal station equipment
 - materials, including massecuite
 - maintenance tools
 - workplace information recording system
- specifications:
 - workplace and operating procedures and related advice on equipment operation, including advice on safe work practices and environmental requirements
 - product and process specifications and operating parameters
 - cleaning procedures, sampling schedule and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume Implementation Guides are found in VETNet: -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>