



Australian Government

Department of Education, Employment and Workplace Relations

FDFBP3001A Operate the bottle filling process

Release: 2

FDFBP3001A Operate the bottle filling process

Modification History

This unit supersedes and is equivalent to FDFBPBFPB Operate the bottle filling process.
April 2012: Minor typographical corrections.

Unit Descriptor

Unit descriptor	This unit covers the skills and knowledge required to set up, operate and shut down a range of semi-automated and automated bottling and packaging equipment involved in the bottle filling process.
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Application of the Unit

Application of the unit	This unit has application in a wine operations bottling and packing environment. It typically targets the worker responsible for applying basic operating principles to the operation and monitoring of a bottle filling process and associated equipment.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability skills	This unit contains employability skills
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare to operate bottle filling equipment	1.1 Product and materials are confirmed and available to meet bottling requirements 1.2 Product and materials are prepared to meet bottling requirements 1.3 Services are confirmed as available and ready for operation 1.4 Bottle filling equipment is prepared and checked to confirm readiness for use 1.5 Filling equipment is set to meet bottling requirements
2. Operate and monitor the bottle filling process	2.1 Bottle filling equipment is started up according to workplace procedures 2.2 Control points are monitored to confirm performance is maintained within specification 2.3 Bottles are filled according to specification 2.4 Bottle filling equipment is monitored to confirm operating condition 2.5 Out-of-specification end product, process and equipment performance is identified, rectified and/or reported
3. Shut down the bottle filling process	3.1 Bottle filling equipment is shut down according to workplace procedures 3.2 Bottle filling equipment is prepared for cleaning 3.3 Waste generated by both the process and cleaning procedures is collected, treated and disposed of, or recycled according to workplace procedures 3.4 Work is conducted in accordance with workplace environmental guidelines
4. Record information	3.5 Workplace information is recorded in appropriate format

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills include:

Note: The following required skills should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Ability to:

- access workplace information to identify bottle filling requirements

- select, fit and use appropriate personal protective clothing and/or equipment
- confirm supply of necessary materials and services. This may include:
 - confirming gas, compressed air, water, power and vacuum are available to equipment
 - checking product to be bottled meets specification
 - checking bottles meet size and type specification and quality and hygiene standards
- liaise with other work areas, which may include:
 - maintenance personnel
 - quality assurance personnel
 - materials supply
 - cellar
 - bottle supply operators
 - bottle sealing operators
 - bottle capsuling operators
 - labelling operators
- confirm equipment status and condition. This may include completing a test run, making minor adjustments as required and confirming that:
 - cleaning and sanitation processes are completed
 - filling tubes meet specification
 - doser is set up and is operational
 - bottle feeds are filled with correct screws and stars and accurately aligned
 - height of filler is adjusted to suit bottle height
 - lines and equipment are flushed with product to be bottled
- set up and start up the process
- monitor the process and equipment operation to identify out-of-specification results or non-compliance. This can involve monitoring:
 - gas pressure
 - vacuum
 - product or wine temperature
 - fill height and volume
- monitor supply and flow of product and materials to and from the process
- take corrective action in response to out-of-specification results or non-compliance
- report and/or record corrective action as instructed
- sort, collect, treat, recycle or dispose of waste
- shut down equipment in response to an emergency situation
- shut down equipment in response to routine shutdown requirements. This may include removing product or consumables from the line
- prepare equipment for cleaning. This may involve draining and/or dismantling equipment, and removing waste either manually or by rinsing, in preparation for cleaning and sanitation
- record workplace information
- maintain work area to meet housekeeping standards
- operate the fine filtration process according to enterprise procedures

- take samples according to enterprise procedures
- conduct tests according to enterprise procedures
- carry out routine maintenance according to enterprise procedures
- handle spirits according to enterprise procedures
- identify, rectify and/or report environmental non-compliance according to enterprise procedures
- use oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge includes:

Note: The following required knowledge should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Knowledge of:

- purpose and principles of bottle filling equipment
- key features of bottle filling equipment and components
- links to related processes
- stages and changes which occur during the process
- effect of process stages on end product
- quality characteristics and uses of end product
- effect of product and materials on process outcomes
- emergency and troubleshooting procedures
- process specification, procedures and operating parameters
- equipment and instrumentation components, purpose and operation
- basic operating principles of process control systems where relevant
- services required
- significance and methods of monitoring control points
- common causes of variation and corrective action required
- Occupational Health and Safety (OHS) hazards and controls
- routine maintenance requirements
- lock-out and tag-out procedures
- procedures and responsibility for reporting problems
- environmental issues and controls
- shutdown sequence
- shutdown and cleaning requirements associated with changeovers and types of shutdown
- collection, treatment and handling requirement for waste generated by process and cleaning operation
- recording requirements and procedures
- fine filtration procedures where relevant
- sampling procedures where relevant

- testing procedures where relevant
- routine maintenance procedures where relevant
- spirit handling requirements and procedures where relevant

Evidence Guide

EVIDENCE GUIDE	
<p>The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<p>Overview of assessment</p>	<p>Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.</p>
<p>Critical aspects for assessment and evidence required to demonstrate competency in this unit</p>	<p>Evidence of ability to:</p> <ul style="list-style-type: none"> • conduct pre-start checks on machinery used for bottle filling • start, operate, monitor and adjust process equipment to achieve required quality outcomes • take corrective action in response to typical faults and inconsistencies • complete workplace records as required • apply safe work practices and identify OHS hazards and controls • safely shut down equipment.
<p>Context of and specific resources for assessment</p>	<p>Assessment must occur in a real or simulated workplace where the assessee has access to:</p> <ul style="list-style-type: none"> • personal protective clothing and equipment as required • work procedures, including advice on company practices, safe work practices, food safety, quality and environmental requirements • instructions, information, specifications and schedules as required • equipment, services and corresponding information as required

EVIDENCE GUIDE	
	<ul style="list-style-type: none"> • products and materials as required • internal and external customers and suppliers as required • cleaning procedures, materials and equipment as required • documentation and recording requirements and procedures.
Method of assessment	This unit should be assessed together with other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competence should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
Policies and procedures	Work is carried out in accordance with workplace procedures, licensing requirements and legislative requirements
Workplace information	<p>Workplace information can include:</p> <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs) • specifications • production schedules or instructions • work notes • Material Safety Data Sheets (MSDS) • manufacturer instructions • verbal direction from manager, supervisor or senior operator
Equipment	Equipment may include:

RANGE STATEMENT	
	<ul style="list-style-type: none"> • counter-pressure fillers • gravity fillers • vacuum fillers • volumetric fillers • pressure fillers
Products and materials	<p>Products and materials may include:</p> <ul style="list-style-type: none"> • still wine, sparkling wine, fortified wine, liqueur, spirits and related drink products • bottles (any size)
Equipment status	<p>Confirming equipment status involves:</p> <ul style="list-style-type: none"> • checking that hygiene and sanitation standards, safety standards and pre-start requirements are met and that equipment is operational • checking operation or calibration of measuring instrumentation
Services	<p>Services may include:</p> <ul style="list-style-type: none"> • power • compressed air • water • inert gas • steam • vacuum
Monitoring the process	<p>Monitoring the process may involve:</p> <ul style="list-style-type: none"> • the use of production data, such as performance control charts
Process operation and monitoring functions	<p>Process operation and monitoring functions may be:</p> <ul style="list-style-type: none"> • manual or involve the use of a process control system
Control points	<p>Control points refer to those key points in a work process that must be monitored and controlled. These include:</p> <ul style="list-style-type: none"> • food safety (critical) • quality and regulatory control points • inspection points
Information systems	<p>Information systems may be:</p> <ul style="list-style-type: none"> • print or screen based

Unit Sector(s)

Unit sector	Wine operations
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Custom Content Section

Not applicable.