



Australian Government

Department of Education, Employment and Workplace Relations

FDFOP2072A Operate a beer filling process

Release: 1

FDFOP2072A Operate a beer filling process

Modification History

New Unit.

Unit Descriptor

This unit covers the preparing, operating, monitoring and shutting down of a beer filling process for kegs, bottles and cans. It includes working within quality requirements and standard operating procedures.

Application of the Unit

This unit applies to operators and other personnel responsible for the filling of kegs, bottles and cans with beer products in both large and small breweries. It includes complying with quality and standard operating procedures and conducting of routine changeovers. Where changeovers require maintenance related skills, the unit FDFOP2011A Conduct routine maintenance should be considered.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

There are no pre-requisites for this competency unit.

Employability Skills Information

This unit contains employability skills.

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 the filler process for operation	1.1 Filling requirements are checked 1.2 Availability of required materials is confirmed 1.3 Availability of services is confirmed 1.4 Pre-operational checks of equipment are conducted including checking that hygiene and sanitation standards are met and all safety guards are in place 1.5 The beer filling process is set to meet production requirements
2 Operate and monitor the beverage filling process	2.1 The filler process is started up according to company procedures 2.2 Control points are monitored to confirm performance is maintained within specification 2.3 Beer containers (cans, kegs, bottles) are checked against production order and container specifications 2.4 Equipment is monitored to confirm operating condition 2.5 Stock flow to and from filler process is maintained within production requirements 2.6 Out-of-specification product, process, equipment performance is identified, rectified and/or reported 2.7 Size and product changeovers are completed in accordance with batch instructions and standard operating procedures
3 Shut down filler	3.1 Filler process is shut down according to company procedures 3.2 Equipment is cleaned and maintained to meet cleaning schedules and procedural requirements 3.3 Waste generated by both the process and cleaning procedures is collected, treated and disposed of or recycled according to company procedures
4 Contribute to continuous improvement of the system	4.1 Quality or process outputs are assessed against specifications 4.2 Opportunities for improvement are identified and investigated 4.3 Proposals for improvements are developed and implemented within company planning arrangements and according to company procedures
5 Record information	5.1 Workplace information is recorded in the appropriate format

Required Skills and Knowledge

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

Required skills include:

Ability to:

- access workplace information to identify production requirements for the beverage filling process
- select, fit and use personal protective clothing and equipment
- identify keg, can and bottle sizes relevant to beer filling operation
- identify types of beer products relevant to beer filling operation
- interpret the production schedule
- confirm supply of necessary materials and services to the filler
- confirm equipment status and condition
- monitor the beverage filling process and equipment operation to identify out-of-specification results or non-compliance. This may include:
 - flow rates/quantity
 - broken bottles
 - faulty kegs or cans
 - contaminated product
 - materials faults
 - equipment faults
 - services faults
- monitor supply and flow of materials to and from the filler
- safely access, isolate and clear jams in filling machine
- take corrective action in response to out-of-specification results or non-compliance
- report and/or record corrective action as required
- replenish the filling process with raw materials, ingredients and packaging consumables
- verify that output meets specifications
- implement size and product changeovers
- sort, collect, treat, recycle or dispose of waste
- shut down beverage filling equipment in response to emergency situation
- shut down beverage filling equipment in response to routine shutdown requirements
- prepare beverage filling equipment for cleaning
- maintain work area to meet housekeeping standards
- record workplace information
- collect samples and conduct tests according to enterprise procedures
- clean and sanitise equipment according to enterprise procedures
- use oral communication skills/language competence 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:

Knowledge of:

- purpose and basic principles of the beverage filling process
- relationship between the filling process, bright beer and other brew house operations as well as other packaging operations
- stages which occur during filling and packaging
- requirements of the filling process
- types of fillers
- aseptic requirements for preparing containers
- microbiological considerations in filling and packaging beer
- effect of filling on the end product
- quality characteristics to be achieved
- set up and start up the process. This can involve the use of process control systems, adjusting the filler to product specifications
- process specifications, procedures and operating parameters
- significance and methods of monitoring control points within the beverage filling process
- equipment and instrumentation components, purpose and operation
- services used in the filling process
- common causes of variation and corrective action required
- OHS hazards and controls
- procedures and responsibility for reporting problems
- shutdown and cleaning requirements associated with changeovers and types of shutdowns
- waste handling requirements and procedures
- recording requirements and procedures including down time
- environmental issues and controls relevant to the filling and sealing process, including waste/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
- aseptic filling and sealing requirements where relevant
- sampling and testing procedures where relevant
- cleaning and sanitation procedures where relevant
- maintain work area to meet housekeeping standards

Evidence Guide

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.

Overview of assessment	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.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • access workplace information to identify requirements for the beer filling process • interpret the production schedule to determine the type of container required • confirm the supply of necessary materials and services and confirm equipment status and condition • set up and start up the process. • monitor the beer filling process and equipment operation and take corrective action in response to out-of-specification results or non-compliance • conduct changeovers for different product or containers • prepare equipment for cleaning • maintain workplace records • conduct routine maintenance • calculate materials required
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • personal protective clothing and equipment • work procedures including advice on safe work practices, food safety and environmental requirements • production schedule, batch instructions • material data safety sheets where appropriate • specifications, control points and filling parameters • beer filling equipment • services as required • stock required for the beer filling process • stock flow system • related work areas and communication system • routine preventative maintenance schedule as

	required • cleaning schedule as required • sampling and testing schedules as required • documentation and recording requirements and procedures
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role. Examples could be: • FDFOP2003A Clean equipment in place • FDFOP2004A Clean and sanitise equipment • FDFOP2011A Conduct routine maintenance • FDFOP2013A Apply sampling procedures • FDFOP2030A Operate a process control interface • MSL973001A Perform basic tests.
Guidance information for assessment	To ensure consistency in one's performance, competency 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

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold 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.	
Beer	Refers to all styles of brewed alcoholic beverages.
Materials used may include:	Bottles, cans, ends (for cans), crowns, carbon dioxide and kegs.
Services may include:	Power, gas, water, steam, hydraulics and air.
Beverage filling equipment may include:	Filling equipment may include: • fillers • pumps • valves • container cleaners • conveyors • handlers and feeding systems for crown seals and can ends • seamers • level detection devices • crowners • cleaners/rinsers • empty container inspectors • coders • clean in place (CIP) equipment. Filling equipment and operation and monitoring functions may be directly controlled or involve the use of a process control system
Control points	• Refer to those key points in a work process which must be monitored and controlled. This includes food safety (critical) quality and regulatory control points as well as inspection points • Monitoring the process may involve the use of production data such as performance control charts • Process operation and monitoring functions may be manual or involve the use of a process control system.
Equipment is monitored	To confirm equipment status involves ensuring that hygiene and sanitation standards are met, all safety

	guards are in place and that equipment is operational.
Workplace information may include:	• Standard Operating Procedures (SOPs); specifications and production schedules • Information systems may be print or screen based.

Unit Sector(s)

Operations.