



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **FDFOP2073A Operate a beer packaging process**

**Release: 1**

## **FDFOP2073A Operate a beer packaging process**

### **Modification History**

New Unit.

### **Unit Descriptor**

This is a specialist unit that has been developed for the brewing sector. It involves preparing, operating, monitoring and shutting down a packing process including packing processes for cartons, boxes, pallets and wrap-around and shrink wrap packers.

### **Application of the Unit**

This unit applies to operators and other personnel responsible for the packing beer into cartons, boxes and pallets in both large and small breweries. It includes complying with quality and standard operating procedures and conducting of routine changeovers. The unit also applies to the use of non air tight wrap-around and shrink wrap packing. Where sealed, airtight film/cello packing is required the unit FDFOP2022A Operate a high speed wrapping process should be selected. 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-requisite units for this competency standard.

### **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  | <ul style="list-style-type: none"><li>1.1 Packing requirements are checked</li><li>1.2 Availability of required materials is confirmed</li><li>1.3 Availability of services is confirmed</li><li>1.4 Pre-operational checks of packing equipment are conducted including checking that hygiene and sanitation standards are met and all safety guards are in place</li><li>1.5 The packaging process is set to meet production requirements</li></ul>                                                                                                                                                                                                                             |
| 2 Operate and monitor the packaging process | <ul style="list-style-type: none"><li>2.1 The packing process is started up according to company specifications</li><li>2.2 Control points are monitored to confirm performance is maintained within specification</li><li>2.3 Packages meet specifications</li><li>2.4 Equipment is monitored to confirm operating condition</li><li>2.5 Stock flow to and from packer process is maintained within production requirements</li><li>2.6 Out-of-specification product, process, equipment performance is identified, rectified and/or reported</li><li>2.7 Size/product changeover is completed in accordance with batch instructions and standard operating procedures</li></ul> |
| 3 Shut down packaging process               | <ul style="list-style-type: none"><li>3.1 Packer process is shut down according to company procedures</li><li>3.2 Equipment is cleaned and maintained to meet cleaning schedules and procedural requirements</li><li>3.3 Waste generated by both the process and cleaning procedures is collected, treated and disposed of or recycled according to company procedures</li></ul>                                                                                                                                                                                                                                                                                                  |
| 4 Record information                        | <ul style="list-style-type: none"><li>4.1 Workplace information is recorded in the appropriate format</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## Required Skills and Knowledge

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

### Required skills includes:

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#### Ability to:

- access workplace information to identify production requirements for the packer process
- select, fit and use personal protective clothing and equipment
- interpret the production schedule
- confirm supply of necessary materials and services to the packer
- confirm packing equipment status and condition
- monitor the packing process and equipment operation to identify out-of-specification results or noncompliance
- This may include:
  - glue seals on cartons
  - incorrect shape
  - materials faults (eg. Printing)
  - incomplete shrink wrapping (eg. Too loose/printing unaligned)
  - equipment faults
  - services faults
- monitor supply and flow of materials to and from the packer
- take corrective action in response to out-of-specification results or non-compliance
- safely access, isolate and clear jams in packaging equipment
- report and/or record corrective action as required
- replenish the packing process with raw materials, ingredients and packaging consumables
- verify that output meets specifications
- implement size/product changeovers
- sort, collect, treat, recycle or dispose of waste
- shut down packing equipment in response to emergency situation
- shut down packing equipment in response to routine shutdown requirements
- prepare packing equipment for cleaning
- maintain work area to meet housekeeping standards
- record workplace information
- 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:

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#### Knowledge of:

- purpose and basic principles of the packing process
- relationship between the packing process, fillers, labellers, other packaging equipment and palletisers including stages which occur during filling and packaging
- stages which occur during filling and packaging
- requirements of the packaging process
- types of packers
- microbiological considerations in filling and packaging beer
- effect of packaging 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 packers to product specifications
- process specifications, procedures and operating parameters
- significance and methods of monitoring control points within the packaging process
- equipment and instrumentation components, purpose and operation
- services used in the packing 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
- sampling and testing procedures where relevant
- cleaning and sanitation procedures where relevant

## 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 | <p>Evidence of ability to:</p> <ul style="list-style-type: none"> <li>• access workplace information to identify requirements for the packing process</li> <li>• interpret the production schedule to determine the type of packing required</li> <li>• confirm the supply of necessary materials and services to the packing process</li> <li>• confirm equipment status and condition</li> <li>• set up and start up the process</li> <li>• monitor the packing process and equipment operation and take corrective action in response to out-of-specification results or non-compliance</li> <li>• reporting and/or recording corrective action as required</li> <li>• conducting changeovers for different product, product size or packing</li> <li>• shut down equipment</li> <li>• conduct routine maintenance</li> <li>• calculate materials required.</li> </ul> |
| Context of and specific resources for assessment                                             | <p>Assessment must occur in a real or simulated workplace where the assessee has access to:</p> <ul style="list-style-type: none"> <li>• personal protective clothing and equipment</li> <li>• work procedures including advice on safe work practices, food safety and environmental requirements</li> <li>• production schedule, batch instructions</li> <li>• material data safety sheets where appropriate</li> <li>• specifications, control points and filling parameters</li> <li>• beer packaging equipment</li> <li>• services as required</li> <li>• stock required for the beer packaging process</li> <li>• stock flow system</li> </ul>                                                                                                                                                                                                                      |

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|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                     | <ul style="list-style-type: none"><li>• related work areas and communication system</li><li>• relevant OHS clothing and equipment</li><li>• routine preventative maintenance schedule as required</li><li>• cleaning schedule as required</li><li>• sampling and testing schedules as required</li><li>• documentation and recording requirements and procedures.</li></ul>                                                                            |
| Method of assessment                | <p>This unit should be assessed together with core units and other units of competency relevant to the function or work role. Examples could be:</p> <ul style="list-style-type: none"><li>• FDFOP2003A Clean equipment in place</li><li>• FDFOP2004A Clean and sanitise equipment</li><li>• FDFOP2011A Conduct routine maintenance</li><li>• FDFOP2013A Apply sampling procedures</li><li>• FDFOP2030A Operate a process control interface.</li></ul> |
| Guidance information for assessment | <p>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.</p>                                                                                                                                                                             |

## Range Statement

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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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. 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.</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Beer</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Refers to all styles of brewed alcoholic beverages.                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Services may include:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Power, gas, water, steam, hydraulics and air.                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Packing equipment may include</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <p>Packing equipment may vary according to type of container and product and may include:</p> <ul style="list-style-type: none"> <li>• wrap-around packer machine</li> <li>• basket packer machinery</li> <li>• shrink wrap machinery</li> <li>• glue guns</li> <li>• conveyors.</li> </ul> <p>Packing equipment and operation and monitoring functions may be directly controlled or involve the use of a process control system.</p>                                          |
| <b>Control points</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>• 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</li> <li>• Monitoring the process may involve the use of production data such as performance control charts</li> <li>• Process operation and monitoring functions may be manual or involve the use of a process control system.</li> </ul> |
| <b>Equipment is monitored</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                        | To confirm equipment status involves ensuring that hygiene and sanitation standards are met, all safety guards are in place and that equipment is operational.                                                                                                                                                                                                                                                                                                                  |
| <b>Workplace information may include:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>• Standard Operating Procedures (SOPs); specifications and production schedules</li> <li>• Information systems may be print or screen based.</li> </ul>                                                                                                                                                                                                                                                                                  |

## Unit Sector(s)

Operations.