

**Modification history**

| Release   | Comments   |
|-----------|--|
| Release 1 | This version released with Food, Beverage and Pharmaceutical Training Package Version 4.0. |

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| <b>FBPCEL4002</b>        | <b>Coordinate wine operations clarification processes</b>  |
| <b>Application</b>       | <p>This unit of competency describes the skills and knowledge required to coordinate work teams to set up, operate, hand over and shut down clarification wine operation processes, including centrifugation flotation and cold settling.</p> <p>The unit applies to individuals who work in a commercial winery and are responsible for coordinating several work teams in clarification wine operations processes to produce red or white wine. They take responsibility for their own work and the outcomes of others, and apply high level planning and problem-solving skills. The processes may also include rotary drum filtration (RDV).</p> <p>All work must be carried out to comply with workplace procedures, according to state/territory health and safety and food safety regulations, legislation and standards that apply to the workplace.</p> <p>No licensing, legislative or certification requirements apply to this unit at the time of publication.</p> |
| <b>Prerequisite Unit</b> | Nil  |
| <b>Unit Sector</b>       | Cellar Operations (CEL)  |

| Elements   | Performance Criteria   |
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| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>   |
| 1. Prepare to coordinate a clarification shift   | 1.1 Confirm handover information from previous shift<br>1.2 Check work orders and other processing requirements for shift<br>1.3 Determine equipment preparation work required for the shift<br>1.4 Confirm capacity of equipment and vessels for estimated volumes<br>1.5 Identify and prioritise work tasks and allocate team responsibilities<br>1.6 Schedule team member rest and meal breaks according to workplace requirements and environmental conditions<br>1.7 Coordinate equipment checks and set-up, and ensure safety equipment is operational<br>1.8 Coordinate supply of consumables   |
| 2. Monitor clarification processes               | 2.1 Oversee handover or start-up of clarification processes<br>2.2 Check workplace health and safety, housekeeping and staff welfare<br>2.3 Apply approved problem-solving principles and techniques to identify and rectify product, process, machine, equipment and operator faults<br>2.4 Ensure quantity, productivity and quality specifications are met<br>2.5 Report any outcomes that do not meet specifications, and major process problems<br>2.6 Report maintenance issues to machinery and equipment technicians<br>2.7 Communicate with clarification process team members and other team leaders about information that impacts on their work<br>2.8 Ensure accurate completion of records |

| <b>Elements</b>                                       | <b>Performance Criteria</b>   |
|---|---|
| <i>Elements describe the essential outcomes.</i>      | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>  |
| 3. Coordinate product changeover                      | 3.1 Ensure current batch is complete, including push through<br>3.2 Coordinate cleaning and sanitising of machinery, equipment and vessels according to workplace requirements<br>3.3 Prepare equipment and consumables for upcoming batch<br>3.4 Oversee start-up of new batch<br>3.5 Ensure completion of changeover records  |
| 4. Coordinate shutdown of the clarification processes | 4.1 Ensure current batch is complete, including push through<br>4.2 Coordinate cleaning of machinery, equipment and vessels<br>4.3 Advise technicians that machinery and equipment are ready for maintenance<br>4.4 Ensure isolation of equipment and machinery according to workplace requirements<br>4.5 Ensure disposal of waste according to workplace and environmental procedures<br>4.6 Ensure accurate completion of shutdown records |

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| <b>Foundation Skills</b>   |   |
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| <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> |   |
| <b>Skill</b>   | <b>Description</b>  |
| Reading  | <ul style="list-style-type: none"> <li>Interpret technical text and symbols in machinery operations manuals and procedures</li> </ul>   |
| Writing  | <ul style="list-style-type: none"> <li>Complete quality reports using accurate industry terminology</li> </ul>  |
| Numeracy   | <ul style="list-style-type: none"> <li>Estimate and calculate known and expected volumes in litres, hectolitres and kilolitres</li> <li>Estimate and calculate quantity, weight, time and ratio</li> <li>Measure and calculate flow rates, including volume per hour</li> </ul> |
| Oral communication   | <ul style="list-style-type: none"> <li>Use open and closed questions to gather information from team members</li> <li>Give clear instructions using industry terminology</li> </ul>   |

| <b>Unit Mapping Information</b>                                  |  |                 |                           |
|--|--|-----------------|---------------------------|
| <b>Code and title current version</b>                            | <b>Code and title previous version</b> | <b>Comments</b> | <b>Equivalence status</b> |
| FBPCEL4002<br>Coordinate wine operations clarification processes | Not applicable                         | New unit        | No equivalent unit        |

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| <b>Links</b> | Companion Volumes, including Implementation Guides, are available at VETNet: <a href="https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4">https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4</a> |
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| TITLE   | Assessment requirements for FBPCEL4002 Coordinate wine operations clarification processes |
|---|---|
| <b>Performance Evidence</b>   |   |
| <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 independently coordinated the safe and efficient set-up, operation, handover and shutdown of two complete shifts of wine clarification processes. Each shift must be a minimum of eight hours. The individual must coordinate the clarification of at least two different batches of juice or wine, according to work orders.</p> <p>For each shift, the individual must have:</p> <ul style="list-style-type: none"> <li>• coordinated at least two of the following processes: <ul style="list-style-type: none"> <li>• centrifuging</li> <li>• flotation</li> <li>• racking after cold settling</li> <li>• rotary vacuum</li> </ul> </li> <li>• coordinated at least three of the following: <ul style="list-style-type: none"> <li>• centrifuge equipment</li> <li>• flotation equipment</li> <li>• racking and cold settling equipment</li> <li>• pumps</li> <li>• rotary vacuum drum</li> <li>• storage tanks</li> </ul> </li> <li>• controlled the product temperature to meet wine making specifications</li> <li>• communicated with at least two cellar operations workers and with at least two of the following: <ul style="list-style-type: none"> <li>• wine maker</li> <li>• cellar operations manager</li> <li>• maintenance team member</li> <li>• laboratory team member.</li> </ul> </li> </ul> <p>For each shift, the individual must have:</p> <ul style="list-style-type: none"> <li>• coordinated at least two cellar operations workers, including scheduling start and finish times, meal and rest breaks</li> <li>• addressed quality issues and anomalies caused by equipment failure and operator error</li> <li>• addressed team members' health and safety requirements, including: <ul style="list-style-type: none"> <li>• correct fit and use of personal protective equipment</li> <li>• correct use of machinery guards, including lock-out and isolation</li> <li>• compliance with vehicle and pedestrian traffic control</li> </ul> </li> <li>• monitored timely and accurate completion of workplace records, including: <ul style="list-style-type: none"> <li>• production notes, including additions to products</li> <li>• machinery and equipment logs</li> <li>• workplace safety reports</li> </ul> </li> <li>• effectively coordinated a batch changeover according to workplace time requirements.</li> </ul> |   |
| <b>Knowledge Evidence</b>   |   |
| <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"> <li>• work orders and production schedules</li> <li>• general operating principles of machinery and equipment, including: <ul style="list-style-type: none"> <li>• centrifuge</li> <li>• continuous or batch flotation equipment</li> <li>• rotary vacuum drum</li> <li>• receival tanks</li> <li>• pumps</li> <li>• inert gas related equipment, including bulk and small cylinders, regulators, valves and pipes</li> </ul> </li> </ul>   |   |

## Knowledge Evidence

- features and functions of machinery and equipment used for the two processes selected in the performance evidence, including:
  - manufacturer and workplace instructions for safe operation
  - control panels and ancillary controls, including manual operations mode
  - operating capacities, efficiencies and applications
  - constraints and other limiting factors
  - location and purpose of guards, rails and sensors
  - knowledge of maintenance required and action to take if maintenance services are not available
  - cleaning requirements
  - routine and non-routine machine and equipment faults, and process rectification
- utility services, including electricity, water, compressed air and inert gases
- heat exchanging systems and equipment
- equipment and vessels, including:
  - volume
  - processing capacity
  - openings, doors and seals
  - valves and process flow
  - line check authorisations and procedures
- machinery and equipment checks, including:
  - pre-start checks, including emergency stop checks
  - lock-out and tag-out
  - return to service after isolation
- consumables, including:
  - cleaning products
  - water and gas supplies
  - filtration media
  - flotation aids
- typical problems related to consumables, including insufficient supplies, preparation, quality and identification
- staff welfare, including:
  - working conditions, including temperature, vibration, noise and dust
  - rostering, breaks, rest and fatigue management
- product and process quality indicators, including:
  - temperature
  - oxidation
  - pectin
  - solids
  - nephelometric turbidity units (NTU) clarification
- quality control requirements, processes and actions, including:
  - production and processing order specifications
  - methods used to check quality
  - common causes of clarification process quality issues, and corrective action required
  - planned sampling and testing associated with process monitoring and control
  - responding to machinery alerts and notifications
  - recording of results
- records and reporting requirements, including:
  - quality
  - productivity
  - handover
  - health and safety
  - process information, including wine tracking
- application of push through processes, including:
  - water
  - gas
  - wine or juice
- product knowledge related to the batch being processed, including:

| <b>Knowledge Evidence</b>  |
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| <ul style="list-style-type: none"> <li>• batch</li> <li>• volume</li> <li>• wine making and food safety regulatory requirements</li> <li>• the interrelationships between clarification processes and previous and subsequent wine making operations processes</li> <li>• product and process changeover procedures and responsibilities</li> <li>• product batch identification and traceability requirements, including:                             <ul style="list-style-type: none"> <li>• workplace requirements</li> <li>• batch records</li> </ul> </li> <li>• workplace health and safety hazards and controls, including:                             <ul style="list-style-type: none"> <li>• awareness of the limitations of controls</li> <li>• personal protective equipment</li> <li>• entering and working in confined spaces, including training and authorisation</li> <li>• hazardous substances, including additions and finings, cleaning products and gases</li> </ul> </li> <li>• procedures and responsibility for reporting production and performance information</li> <li>• environmental issues and controls relevant to the clarification process, including:                             <ul style="list-style-type: none"> <li>• rework and reuse of products</li> <li>• water use and recycling</li> <li>• waste processing</li> <li>• energy usage</li> </ul> </li> <li>• materials and manual handling procedures related to clarification processes.</li> </ul> |

| <b>Assessment Conditions</b>  |
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| <p>Assessment of skills must take place under the following conditions:</p> <ul style="list-style-type: none"> <li>• physical conditions:                             <ul style="list-style-type: none"> <li>• a commercial winery</li> </ul> </li> <li>• resources, equipment and materials:                             <ul style="list-style-type: none"> <li>• the machinery and equipment stipulated in the performance evidence</li> <li>• the juice or wine stipulated in the performance evidence</li> </ul> </li> <li>• specifications:                             <ul style="list-style-type: none"> <li>• two work orders as stipulated in the performance evidence</li> <li>• workplace procedures for operating clarification processes, machinery and equipment stipulated in the performance evidence</li> </ul> </li> <li>• relationships:                             <ul style="list-style-type: none"> <li>• team members and others stipulated in the performance evidence.</li> </ul> </li> </ul> <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p> |

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