

**Modification history**

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

FBPCEL4002	Coordinate wine operations clarification processes
<b>Application</b>	<p>This unit of competency describes the skills and knowledge required to coordinate work teams to set up, operate, handover and shut down clarification wine operation processes, including centrifugation flotation and cold settling.</p> <p>The unit applies to individuals who work under broad direction in a commercial winery 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>	<p>Nil</p> <p>(Advice will be provided in the Companion Volume Implementation Guide recommending that this unit should be trained and assessed after completing some other cellar operations units that are listed in the Certificate III in Wine Industry Operations)</p>
<b>Unit Sector</b>	Cellar Operations (CEL)

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 to coordinate a clarification shift	1.1 Confirm handover information from previous shift 1.2 Check work orders and other processing requirements for shift 1.3 Determine other equipment preparation work required for the shift 1.4 Confirm capacity of equipment and vessels for estimated volumes 1.5 Identify and prioritise work tasks and allocate team responsibilities 1.6 Schedule team member rest and meal breaks according to workplace requirement and environmental conditions 1.7 Coordinate equipment checks and set up, including safety equipment is operational 1.8 Coordinate supply of consumables

<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>
2. Monitor clarification processes	2.1 Oversee handover or start up of clarification processes 2.2 Carry out quality checks and complete records according to workplace requirements 2.3 Apply approved problem-solving principles (including manual operations mode) and techniques to identify and rectify product, process, machine, equipment and operator faults 2.4 Check workplace health and safety, housekeeping and staff wellbeing 2.5 Ensure quantity, productivity and quality specifications are met 2.6 Report any outcomes that do not meet specifications and major process problems 2.7 Report issues requiring maintenance to machinery and equipment technicians 2.7 Communicate with clarification process team members information that impacts on their work 2.8 Communicate with other team leaders information that impacts on their work flow 2.9 Ensure completion of records
3. Coordinate product change over	3.1 Ensure final run of current batch is complete, including push through 3.2 Coordinate cleaning and sanitizing of machinery, equipment and vessels 3.3 Prepare equipment and consumables for upcoming batch 3.4 Oversee start up of clarification processes for new batch 3.5 Ensure completion of change over records
4. Coordinate shut down of the clarification processes	4.1 Ensure final run of current batch is complete, including push through 4.2 Coordinate cleaning of machinery, equipment and vessels 4.3 Advise technicians that machinery and equipment is ready for maintenance 4.3 Ensure isolation of equipment and machinery according to workplace requirements 4.4 Ensure disposal of waste according to workplace and environmental procedures 4.5 Ensure completion of shut down records

<b>Foundation Skills</b>	
<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 correct 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>Use industry terminology to communicate information from team members</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 Coordinate wine operations clarification processes	Not applicable	New unit	No equivalent unit

<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, hand over and shut down of two complete shifts of wine clarification processes. Each shift must be a minimum of 8 hours. The individual must coordinate the clarification of at least two different batches of juice or wine, according to work orders, including:</p> <ul style="list-style-type: none"> <li>• using at least two of the following processes: <ul style="list-style-type: none"> <li>• centrifuging</li> <li>• floatation</li> <li>• racking after cold settling</li> <li>• rotary vacuum</li> </ul> </li> <li>• using at least three of the following: <ul style="list-style-type: none"> <li>• centrifuge equipment</li> <li>• continuous or batch floatation equipment</li> <li>• vessels and equipment</li> <li>• rotary vacuum drum</li> <li>• receival tanks</li> </ul> </li> <li>• controlling 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 different 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 change over 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>• operating principles, manufacturer and workplace instructions for safe operation of machinery and equipment, including: <ul style="list-style-type: none"> <li>• centrifuge</li> <li>• continuous or batch floatation 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> <li>• features and functions of machinery, equipment, including: <ul style="list-style-type: none"> <li>• control panels and ancillary controls</li> </ul> </li> </ul>	

## Knowledge Evidence

- 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
- utility services, including electricity, water, compressed air, and inert gasses
- vessel cooling 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:
  - prestart 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
- 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:
  - batch
  - volume
  - wine making and food safety regulatory requirements
- the interrelationships between clarification processes and previous and subsequent wine making operations processes
- product and process changeover procedures and responsibilities
- product batch identification and traceability requirements, including:

<p><b>Knowledge Evidence</b></p> <ul style="list-style-type: none"> <li>• workplace requirements</li> <li>• batch records</li> <li>• work health and safety hazards and controls, including:             <ul style="list-style-type: none"> <li>• awareness of the limitations of controls</li> <li>• protective clothing and 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 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 the clarification processes.</li> </ul>	
<p><b>Assessment Conditions</b></p> <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 or an environment that accurately represents workplace conditions</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>• processing consumables specifications:             <ul style="list-style-type: none"> <li>• two batch orders as stipulated in the performance evidence</li> <li>• workplace procedures for operating clarification processes and related 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>	
<b>Links</b>	<p>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></p>