

## Modification history

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 5.0

<b>FBPOIL3XX4</b>	<b>Operate and monitor a flake preparation process</b>
<b>Application</b>	<p>This unit of competency describes the skills and knowledge required to prepare the oil and water phases and operate, monitor, adjust and shut down the flaking process to prepare pastry margarine for further processing through a complexor.</p> <p>This unit applies to individuals who apply basic operating principles to the operation and monitoring of flake preparation equipment and processes in an edible oils production environment.</p> <p>All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.</p> <p>No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
<b>Prerequisite Unit</b>	Nil
<b>Unit Sector</b>	Oil refining (OIL)

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 the flake preparation and related equipment for operation	1.1 Ensure oil stock and emulsion are available to meet the product recipe requirements 1.2 Identify safety requirements and wear appropriate personal protective clothing and equipment ensuring correct fit 1.3 Confirm flaking equipment and drum are clean and not locked out 1.4 Fit and adjust machine components and related attachments according to operating requirements 1.5 Enter processing or operating parameters to meet safety and production requirements 1.6 Conduct pre-start checks according to operator instructions
2. Operate and monitor equipment and services	2.1 Start up and operate the flake preparation process according to safe operating procedures 2.2 Ensure equipment and hoses are placed for optimal operations and to ensure safety 2.3 Monitor equipment and services to ensure optimal operations 2.4 Identify and report irregularities in equipment operation and report any maintenance requirements 2.5 Confirm that specifications are met at each stage according to production specifications 2.6 Identify, rectify or report out-of-specification product or process outcomes according to workplace procedures 2.7 Maintain the work area according to workplace guidelines 2.8 Test flake samples to ensure product meets specifications 2.9 Enter workplace records in required format
3. Shut down the flake preparation process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements according to workplace requirements 3.4 Ensure waste is disposed of in line with environmental requirements

<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>
Learning	<ul style="list-style-type: none"> <li>Solve routine problems according to workplace guidelines and using experience of past solutions</li> </ul>
Reading	<ul style="list-style-type: none"> <li>Interpret standard operating procedures for the flake preparation process</li> </ul>
Writing	<ul style="list-style-type: none"> <li>Complete processing records using electronic, digital and/or paper-based formats</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>Monitor control points for flake and emulsion temperature, drum speed, flake thickness, moisture and salt levels</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>
FBPOIL3XX4 Operate and monitor a flake preparation process	FBPGPS2004 Operate a flake preparation process	Unit title and code updated to better match work task  Minor changes to Performance Criteria to clarify intent  Foundation skills refined  Performance Evidence clarified  Minor changes to Knowledge Evidence and Assessment Conditions	Equivalent unit

<b>Links</b>	Companion Volumes, including Implementation Guides, are available at VETNet: <a href="https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4">https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4</a>
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<b>TITLE</b>	<b>Assessment requirements for FBPOIL3XX4 Operate and monitor a flake preparation process</b>
<b>Performance Evidence</b>	
<p>An individual demonstrating competency must satisfy all elements and performance criteria in this unit. There must be evidence that the individual has operated and monitored a flake preparation process to produce at least one batch of pastry fat to meet product specification, including:</p> <ul style="list-style-type: none"> <li>• applying safe work practices</li> <li>• taking corrective action in response to typical faults and inconsistencies.</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>• purpose and basic principles of the fractionation process, including:             <ul style="list-style-type: none"> <li>• a basic understanding of the chemical structure of oil</li> <li>• the effect of fractionation on this structure</li> </ul> </li> <li>• basic operating principles of equipment, including:             <ul style="list-style-type: none"> <li>• main equipment components</li> <li>• status and purpose of guards and lagging</li> <li>• equipment operating capacities and applications</li> <li>• the purpose and location of sensors and related feedback instrumentation</li> </ul> </li> <li>• services required for a flake preparation process and action to take if services are not available</li> <li>• good manufacturing practices (GMP) relevant to work task</li> <li>• the flow of the fractionation process and the effect of outputs on downstream processes</li> <li>• quality characteristics to be achieved by the fractionation process</li> <li>• quality requirements of oil for fractionation and effect of variation on fractionation process performance</li> <li>• operating requirements and parameters and corrective action required where operation is outside specified operating parameters</li> <li>• typical equipment faults and related causes, including:             <ul style="list-style-type: none"> <li>• signs and symptoms of faulty equipment</li> <li>• early warning signs of potential problems</li> </ul> </li> <li>• methods used to monitor the fractionation process, including inspecting, measuring and testing</li> <li>• inspection or test points (control points) in the fractionation process and the related procedures and recording requirements</li> <li>• contamination and food safety risks associated with the fractionation process and related control measures</li> <li>• common causes of variation and corrective action required</li> <li>• health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process</li> <li>• safe handling and manual handling procedures</li> <li>• requirements of different shutdowns as appropriate to the fractionation process and workplace production requirements, including:             <ul style="list-style-type: none"> <li>• emergency and routine shutdowns</li> <li>• procedures to follow in the event of a power outage</li> </ul> </li> <li>• isolation, lock out and tag out procedures and responsibilities</li> <li>• procedures and responsibility for reporting production and performance information</li> <li>• environmental issues and controls relevant to the fractionation process</li> <li>• basic operating principles of process control, including the relationship between control panels and systems and the physical equipment</li> <li>• routine maintenance procedures for drum and flaking equipment</li> <li>• cleaning procedures for drum and flaking equipment</li> <li>• product traceability procedures.</li> </ul>	

<b>Assessment Conditions</b>	
<p>Assessment of skills must take place under the following conditions:</p> <ul style="list-style-type: none"> <li>• physical conditions:</li> </ul>	

<b>Assessment Conditions</b>	
<ul style="list-style-type: none"> <li>• a workplace or an environment that accurately represents workplace conditions</li> <li>• resources, equipment and materials:                             <ul style="list-style-type: none"> <li>• personal protective clothing and equipment</li> <li>• oil and water phase preparation equipment and services</li> <li>• drum and flaking equipment</li> <li>• oil and ingredients</li> <li>• sampling schedules and test procedures and equipment</li> <li>• cleaning materials and equipment</li> </ul> </li> <li>• specifications:                             <ul style="list-style-type: none"> <li>• work procedures, including advice on safe work practices, food safety, quality and environmental requirements</li> <li>• information on equipment capacity and operating parameters</li> <li>• production schedule/batch details, control points and processing parameters</li> <li>• documentation and recording requirements.</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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