

Modification history

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 3.0.

FBPTEC4XX5	Manage pot still operations
Application	<p>This unit of competency describes the skills and knowledge required to oversee the operations of a pot still to produce batches of spirit.</p> <p>This unit applies to those workers who have responsibility for overseeing the production of spirits and the quality assurance requirements associated with those products. It may include supervising the work of others.</p> <p>Legislative requirements relating to distilling alcohol apply to this unit. Users are advised to check current requirements with the Australian Tax Office and state / territory liquor licensing and health agencies.</p>
Prerequisite Unit	Nil
Unit Sector	Technical (TEC)

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 for pot distillation	1.1 Identify hazards associated with pot still operations and manage risks 1.2 Receive wash and check quality meets specifications 1.3 Assemble parts of the pot still and prepare for operation 1.4 Turn on cooling water briefly to check there are no leaks 1.5 Prepare receival vessels for different parts of still run
2. Operate pot still to distil spirit	2.1 Transfer wash to boiler of still 2.2 Place alcohol receival vessel 2.3 Activate boiler and turn on thermometer or insert temperature probe 2.4 Monitor temperature and turn on cooling water when temperature reaches around 50C 2.5 Cut flow of alcohol at specified points to collect foreshots, heads, hearts and tails in different containers 2.6 Stop collecting distilled alcohol when temperature reaches specified point 2.7 Conduct standard tests to monitor alcohol content and quality of product 2.8 Analyse test results and adjust process as required 2.9 Complete processing and batch records to ensure traceability
3. Shutdown pot still	3.1 Shut down boiler and turn off water 3.2 Dispose of liquid that remains in boiler in line with regulatory and environmental guidelines 3.3 Clean boiler, dome top and condenser thoroughly when cool 3.4 Transfer alcohol back to kettle of still for further distillation, as required for end product
4. Conduct housekeeping activities	4.1 Clean equipment and work area in line with workplace procedures 4.2 Conduct routine maintenance activities 4.3 Dispose of waste in line with regulatory requirements

Foundation Skills	
<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>	
Skill	Description
Numeracy	<ul style="list-style-type: none"> Accurately read and interpret gauges and test results

Foundation Skills	
<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>	
Skill	Description
	<ul style="list-style-type: none"> Calculations to determine alcohol by volume (ABV) based on gravity change
Get the work done	<ul style="list-style-type: none"> Identify changes in quality of product and trace source

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
FBPTEC4XX5 Manage pot still operations		New unit	No equivalent unit

Links	
	Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4

TITLE	Assessment requirements for FBPTEC4XX5 Manage pot still operations
Performance Evidence	
<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 managed pot still operations to collect spirit in line with pre-determined specifications, on at least one occasion.</p>	

Knowledge Evidence	
<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"> • spirits typically distilled through a pot still • shape and parts of a pot still and their purpose (heat source, kettle, condenser coil, heat exchanger, receiver) • critical differences between a pot still and a continuous still • purposes of first and second distillation • boiling temperature of water and ethanol • temperatures to cut alcohol (or switch containers) • harmful chemicals that are produced through distillation, such as methanol • quality and characteristics of different parts of the still run, including foreshots, heads, hearts and tails • stages and changes required for equipment operation, specific to product • typical tests carried out to check alcohol content, flavour and quality • instruments used for testing and how each is calibrated, such as hydrometer, alchometer • procedures and equipment used for transfer operations, including pumps, membranes, hoses valves, control instruments • equipment and instrumentation components, purpose and operation • significance and method of monitoring control points within the equipment operation • common causes of variation and corrective action required • sanitisation procedures and purpose • hazards, risks and controls, including for working with heat, steam and ethanol • shutdown and cleaning requirements associated with pot still • routine maintenance requirements • waste handling and disposal requirements • legislation, regulation and workplace licence requirements related to distilled spirits, including license to operate a still, Australian Taxation Office (ATO) in relation to excise tax, legal definitions of whisky, brandy, rum and gin, waste disposal • recording requirements for traceability of product and Australian Taxation Office (ATO) requirements. 	

Assessment Conditions	
<p>Assessment of skills must take place under the following conditions:</p> <ul style="list-style-type: none"> • physical conditions: <ul style="list-style-type: none"> • skills must be demonstrated in a workplace setting or an environment that accurately represents a real workplace • resources, equipment and materials: <ul style="list-style-type: none"> • wash • pot still • testing equipment • specifications <ul style="list-style-type: none"> • product specifications. <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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