Modification history

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

| FBPTEC3XX15 | Filter fermented beverages |
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| Application | This unit of competency describes the skills and knowledge required to prepare and operate filtration equipment using lenticular, plate and frame and/or centrifugal systems, to filter fermented beverages.  The unit applies to individuals who work in brewing operations and take responsibility for their own work using discretion and judgement in the selection and use of available resources.  Legislative requirements relating to producing 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. |
| Prerequisite Unit | Nil |
| Unit Sector | Technical (TEC) |

| Elements | Performance Criteria |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Prepare the filtration process for operation | 1.1 Identify and confirm production requirements  1.2 Confirm availability and prepare services, product and materials to meet production requirements  1.3 Confirm environmental guidelines and identify potential health and safety hazards and controls according to workplace procedures  1.4 Select, fit and use personal protective equipment relevant to the job role  1.5 Assemble filtration equipment  1.6 Check filters are in place and confirm readiness for use according to workplace procedures  1.7 Check the flow path of product and ensure equipment is ready for operation  1.8 Set the process to meet filtration requirements |
| 2. Operate and monitor the filtration process | 2.1 Start up the filtration process according to workplace procedures  2.2 Sterilise system before feeding product through  2.3 Monitor filtration process and pressure to confirm filtered product meets specifications  2.4 Monitor dissolved oxygen levels  2.5 Identify and address non-conformance of product, process and equipment |
| 3. Shut down the filtration process | 3.1 Identify and implement appropriate shutdown procedures  3.2 Drain and dismantle equipment safely and prepare for cleaning  3.3 Clean equipment thoroughly  3.4 Dispose of waste generated by the filtration process and cleaning procedures, in line with regulatory requirements  3.5 Record workplace information according to workplace requirements |

| Foundation Skills  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. | |
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| Skill | Description |
| Reading | * Interpret production and process information from a variety of workplace documents |
| Numeracy | * Calculate numerical information relating to measurements, quantities, pressure and operational specifications * Interpret gauge readings during monitoring of process including pound of force per square inch (psi), kilopascal (kPa), temperature, dissolved oxygen * Interpret measurements and volumes including microns (µ), litres (L), hectolitres (hL) |
| Get the work done | * Plan, sequence and implement tasks required to achieve production requirements |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPTEC3XX15 Filter fermented beverages |  | New unit | No equivalent unit |

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| 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 FBPTEC3XX15 Filter fermented beverages |
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| Performance Evidence | |
| An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.  There must be evidence that the individual has effectively operated the filtration process to filter fermented beverages to specification on at least two occasions, using one or more of the following systems:   * lenticular * plate and frame * centrifugal. | |

| Knowledge Evidence |
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| 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:   * principles of filter aid filtration (or dynamic depth filtration) * lenticular, plate and frame and centrifugal filtration processes, their basic operating principles and system parts * filtration media, including diatomaceous earth (DE), cellulose sheets * grades of filters * the effects that filtering has on end product and acceptable degrees of haze * links between filtration and other processes used in producing fermented beverages * importance of cleaning, sanitising and sterilising * methods to clean and sanitise filters * pump operation * instruments used for monitoring pressure, dissolved oxygen (DO) and calibration requirements * the effects that DO has on fermented beverages * common causes of non-conformance results for product, process and equipment and corrective action required including: * issues that can be rectified * issues that must be reported * responsibilities for health and safety in the workplace including: * health and safety hazards associated with the filtration process * methods for controlling risks associated with work health and safety hazards * responsibilities for identifying and controlling environmental issues * how to safely dispose of the sediment filtered out the fermented beverage * workplace procedures and responsibility for: * reporting problems * shutting down the process * cleaning * handling waste * regulatory record keeping requirements. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * a beverage production workplace or an environment that accurately represents workplace conditions * resources, equipment and materials: * personal protective equipment for filtration operations * filtration equipment and filters and related materials required for operations * product for filtration * system for recording and reporting information * specifications: * workplace procedures for filtration operations.   Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. |

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