Modification history

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| Release | Comments |
| Release 1 | This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 6.0 |

| FBPHVB3011 | Operate and monitor the production of fillings |
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| Application | This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down processes used to produce fillings, toppings and sauces that may be used to finish sweet or savory breads, pastries, cakes, puddings and biscuits.  This unit applies to individuals who take responsibility for the operation and monitoring of a filling production process and associated equipment in a high volume baking environment. The work includes identifying and providing solutions to routine and some non-routine problems.  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.  No licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | High Volume Baking (HVB) |

| 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 for work in processing area | 1.1 Check and confirm production schedule  1.2 Confirm materials are available to meet production requirements  1.3 Wear appropriate personal protective clothing and ensure correct fit  1.4 Prepare ingredients to meet production requirements  1.5 Confirm services are available and ready for operation |
| 2. Prepare process for operation | 2.1 Check equipment is clean and not locked out  2.2 Fit machine components and related attachments, and adjust to meet operating requirements  2.3 Enter processing and operating parameters as required to meet safety, food safety, quality and production requirements  2.4 Carry out pre-start checks according to workplace health and safety and operating requirements  2.5 Load ingredients ready for processing, according to product specification and safe work procedures |
| 3. Operate and monitor equipment | 3.1 Start and operate the production process to ensure optimal performance  3.2 Monitor equipment and services to ensure optimal performance  3.3 Monitor product to ensure specifications are met  3.4 Take samples and test product to ensure it meets specifications  3.5 Identify, adjust and report out-of-specification equipment, product or process outcomes according to workplace requirements  3.6 Follow and apply workplace cleaning procedures and environmental requirements  3.7 Complete batch processing records according to workplace requirements |
| 4. Complete the process | 4.1 Identify the appropriate shutdown procedure  4.2 Shut down the process safely according to operating procedures  4.3 Prepare equipment for cleaning in preparation for maintenance or next start-up  4.4 Identify and report maintenance requirements according to workplace requirements  4.5 Complete workplace records according to workplace requirements |
| 5. Recognise and correct common faults | 5.1 Test end product to ensure it meets specifications  5.2 Identify causes of typical faults and how they can be rectified according to workplace requirements  5.3 Discard faulty products according to workplace and environmental guidelines |

| 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 |
| Learning | * Problem-solve issues with process to ensure quality outcomes |
| Reading | * Interpret workplace and standard operating procedures relevant to work task * Interpret production schedules and requirements |
| Writing | * Record processing data using digital and/or paper-based formats |
| Numeracy | * Scale recipes up or down * Calculate yield of batch * Weigh ingredients (mg, g, kg, T) * Monitor and interpret production and process control indicators and data, including temperature (°C), time, speed, moisture |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPHVB3011 Operate and monitor the production of fillings | Not applicable | The unit has been created to address a skill or task required by industry that is not covered by an existing unit | Newly Created |

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

| TITLE | Assessment requirements for FBPHVB3011 Operate and monitor the production of fillings |
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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 operated and monitored production equipment to produce at least two different types of fillings, toppings or sauces, using different methods, to meet product specifications, including:   * applying safe work procedures * following food safety procedures * taking corrective action in response to typical faults and inconsistencies. | |

| 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:   * purpose and basic principles of each stage of the mixing process, and the effect of variables (time, temperature and mixing speed) * purpose of mixing equipment * quality characteristics of filling, topping or sauce to be achieved and how it will be applied to the baked product * basic operating principles of equipment, including: * main equipment components * status and purpose of guards * equipment operating capacities and applications * the purpose and location of sensors and related feedback instrumentation * services required and action to take if services are not available * the flow of the mixing process and the effect of outputs on downstream processes * process specifications, procedures and operating parameters for fillings, toppings and sauces for different products, including: * mixing time and speed * ingredients * product consistency, appearance and texture * operating requirements and parameters, and corrective action required where operation is outside specified operating parameters * typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems * methods used to monitor the mixing process, including inspecting, measuring specific gravity, flow tests, checking weights and temperatures * inspection or test points (control points) in the mixing process and the related procedures and recording requirements * contamination/cross-contamination, cross-contact and food safety risks associated with the mixing process, and related control measures * common microbiological, physical, chemical and allergen hazards related to the foods handled in the work area, including the types of hazards likely to occur, the conditions under which they occur, possible consequences, and control methods to prevent occurrence * health and safety hazards and controls, including limitations of protective clothing and equipment used * requirements of different shutdowns as appropriate to the mixing process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage * isolation, lock-out and tag-out procedures and responsibilities relevant to operating a mixing process * environmental issues and controls relevant to the mixing process, including waste/rework collection and handling procedures related to the process * basic operating principles of process control where relevant, including the relationship between control panels and systems and the physical equipment * routine maintenance procedures for mixing equipment * emerging technologies related to high volume production baking * cleaning and sanitisation procedures for mixing equipment * procedures and responsibility for reporting production information and traceability of product. |

| Assessment Conditions |
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| Assessment of the skills in this unit of competency must take place under the following conditions:   * physical conditions: * a high volume production bakery or an environment that accurately represents workplace conditions * resources, equipment and materials: * personal protective equipment * mixing equipment and related services * ingredients * specifications: * work procedures, including advice on safe work practices, food safety, quality and environmental requirements * information on equipment capacity and operating parameters * recipe/batch instructions * documentation and recording requirements.   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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