Modification history

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

| FBPHVB3004 | Manufacture wafer products |
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| Application | This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a wafer products manufacturing process.  This unit applies to individuals who take responsibility for the operation and monitoring of a wafer manufacturing process and associated equipment in a production 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 occupational 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 the wafer process for operation | 1.1 Confirm availability of materials to meet production requirements  1.2 Identify health, safety and food safety hazards and address risks, including using appropriate personal protective clothing and equipment  1.3 Identify and confirm equipment is clean and maintenance requirements have been met, according to health, safety and food safety requirements  1.4 Fit machine components and related attachments and adjust to meet operating requirements  1.5 Select processing and operating parameters to meet safety and production requirements  1.6 Carry out pre-start checks according to operator instructions |
| 2. Operate and monitor equipment | 2.1 Start the wafer products manufacturing process according to workplace procedures  2.2 Monitor equipment and services to ensure optimal operations  2.3 Monitor the product to confirm that it meets specifications  2.4 Take samples and test product to ensure it meets specifications  2.5 Identify, rectify and report out-of-specification product and process outcomes  2.6 Unload and transfer baked products for cooling and finishing  2.7 Conduct work and maintain a clean and tidy workplace according to workplace housekeeping procedures and environmental guidelines |
| 3. Complete the process | 3.1 Identify the appropriate shutdown procedure and implement  3.2 Identify and report maintenance requirements  3.3 Maintain workplace and batch records accurately according to workplace procedures |
| 4. Recognise and correct common faults | 4.1 Test wafer product to ensure it meets specifications  4.2 Identify causes of typical faults and how they can be rectified according to workplace requirements  4.3 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 |
| Reading | * Interpret workplace and standard operating procedures * Interpret production requirements * Interact with process control screens |
| Writing | * Complete processing records using digital and/or paper-based formats |
| Numeracy | * Monitor and interpret production and process control indicators and data, including temperature (°C), wafer width, length and thickness (mm) and weight (mg, g), speed settings * Use basic arithmetic to scale recipes up and down |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPHVB3004 Manufacture wafer products | FBPPBK2004 Manufacture wafer products | Updated unit code  Minor changes to wording of Elements and Performance Criteria to clarify intent  Element 4 added  Foundation Skills refined  Performance Evidence clarified  Minor changes to Knowledge Evidence and Assessment Conditions to clarify requirements | Not Equivalent |

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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 FBPHVB3004 Manufacture wafer products |
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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 set up, operated, adjusted and shut down a wafer manufacturing process to produce at least one batch of wafers to specification, including:   * applying safe work practices * following food safety procedures * ensuring correct batter is supplied and confirming settings, including: * wafer plates are selected for product type * oven settings for product type * web/chain speed settings * depositing rate settings * monitoring and adjusting process equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm process remains within specification, including: * wafer size (width, length and thickness) * wafer texture, colour and weight * wafer moisture level * 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 wafer manufacturing process * basic operating principles of equipment, including: * main equipment components * status and purpose of guards * equipment operating capacities and applications * purpose and location of sensors and related feedback instrumentation * typical equipment faults and related causes, including signs and symptoms of faulty equipment, loss of power, and early warning signs of potential problems * the flow of the wafer manufacturing process, and the effect of outputs on downstream processes * basic operating principles of process control, including the relationship between control panels and systems and wafer products manufacturing equipment * specifications and quality characteristics to be achieved by the wafer manufacturing process, including: * quality requirements of materials * effect of variation on wafer manufacturing process performance * changes that occur in product during processing * operating requirements and parameters, and corrective action required where operation is outside specified operating parameters * methods used to monitor the wafer manufacturing process, including: * inspecting, measuring and testing as required by the wafer products manufacturing process * inspection or test points (control points) in the process * related procedures and recording requirements * common causes of variation, and corrective action required * good manufacturing practices (GMP) relevant to work task * health and safety hazards and controls, including: * routine shutdown for wafer manufacturing process * emergency shutdowns * procedures to follow in the event of a power outage * isolation, lock-out and tag-out procedures and responsibilities * procedures and responsibility for reporting production and performance information * contamination/cross-contamination and food safety risks associated with the process, and related control measures * common microbiological, physical, chemical and allergenic hazards that can occur when processing wafers, including the types of hazards likely to occur, the conditions under which they occur, and possible consequences * waste and rework collection and handling procedures * emerging technologies related to high volume production baking * cleaning and sanitisation procedures for wafer manufacturing equipment * procedures to record traceability of product and ingredients. |

| 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 clothing and equipment * depositing, baking and related equipment * wafer plates * batter to meet production requirements * cleaning materials and equipment * specifications: * work instructions and procedures, including control points and wafer manufacturing processing parameters * production schedule and recipe and batch specifications for wafer products * information on equipment capacity and operating parameters * recording requirements and procedures.   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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