Modification history

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| Release | Comments |
| Release 1 | This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0 |

| FBPOPR2025 | Manufacture extruded and toasted products |
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| Application | This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down an extrusion, toasting and breaking process used in the manufacture of biscuit products.  This unit applies to individuals who work under general supervision and exercise limited autonomy in a biscuit production environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of machines and equipment in the production of biscuits. Biscuits may be for human consumption or animal feed.  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.  No occupational licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Operational (OPR) |

| 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 Read or listen to work instructions from supervisor and clarify where needed  1.2 Identify work health and safety hazards and tell supervisor  1.3 Wear appropriate personal protective equipment and ensure correct fit according to work health and safety requirements  1.4 Confirm materials are available to meet operating requirements  1.5 Identify and confirm cleaning and maintenance requirements and status according to work health and safety and food safety procedures |
| 2. Prepare the extrusion, toasting and breaking process for operation | 2.1 Fit and adjust machine components and related attachments  2.2 Enter processing and operating parameters to meet safety and production requirements  2.3 Check equipment performance and adjust according to operating requirements  2.4 Carry out pre-start checks according to operator instructions |
| 3. Operate and monitor the extrusion, toasting and breaking process | 3.1 Start, operate and monitor the process for variation in operating conditions according to work health and safety and operating procedures  3.2 Monitor the process to confirm that biscuit product meets specifications  3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements |
| 4. Shut down the extrusion, toasting and breaking process | 4.1 Identify the appropriate shutdown procedure and implement  4.2 Report maintenance requirements according to workplace procedures  4.3 Maintain workplace records in required format |

| 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 relevant to job role * Interpret production requirements |
| Writing | * Record operating, routine maintenance and shutdown information on paper-based and electronic media |
| Numeracy | * Monitor and interpret production and process control indicators and data * Monitor supply and flow of materials to and from the process |
| Navigate the world of work | * Apply workplace procedures to own role and responsibilities * Identify skills, knowledge and experience required for performing own role in the workplace * Ask questions to clarify understanding or seek further information |
| Interact with others | * Communicate and report operational and safety information to relevant personnel * Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures |
| Get the work done | * Access and interpret process control panels and system * Maintain a clean and hazard-free work area * Identify out-of-specification standards and maintain quality specifications * Confirm equipment status and condition * interpret process and equipment information to monitor process and respond to abnormal performance and variations |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPOPR2025 Manufacture extruded and toasted products | FDFOP2025A Manufacture extruded and toasted products | Updated to meet Standards for Training Packages | 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 FBPOPR2025 Manufacture extruded and toasted products |
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| Performance Evidence | |
| An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.  There must be evidence that the individual has manufactured extruded and toasted products on at least one occasion, including:   * accessing workplace information to identify extrusion, toasting and breaking process requirements * selecting, fitting and using PPE * confirming supply of necessary materials and services, including ensuring a continuous supply of ingredients to the process * conducting pre-start checks, including: * inspecting equipment condition to identify any signs of wear * selecting appropriate settings and/or related parameters * cancelling isolation or lock-outs as required * confirming that related equipment is clean and correctly configured for processing requirements * positioning sensors and controls correctly * ensuring any scheduled maintenance has been carried out * confirming that all safety guards are in place and operational * confirming extruder settings, including: * water pump is operating * bin discharge speed * temperature and heater * motor speed * screw feed * starting, operating, monitoring and adjusting process equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm the process remains within specification, including: * temperatures * biscuit size (width, length and thickness) * biscuit texture, colour and weight * biscuit moisture level * clean, even break/cut * monitoring supply and flow of materials to and from the extrusion, toasting and breaking process * taking corrective action in response to out-of-specification results * responding to and/or reporting equipment failure within level of responsibility * locating emergency stop functions on equipment * shutting down equipment in response to an emergency situation * following isolation and lock-out/tag-out procedures as required to take extrusion, toasting and breaking process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility * completing workplace records as required * maintaining work area to meet housekeeping standards * using process control systems according to enterprise procedures * cleaning and sanitising equipment according to enterprise procedures * following relevant work health and safety procedures. | |

| 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 biscuit manufacturing process * 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 process and the effect of outputs on downstream processes * changes that occur in the product during processing * quality characteristics to be achieved by the process * quality requirements of materials and the effect of variation on process performance * 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 * early warning signs of potential problems * methods used to monitor the production process, including inspecting, measuring and testing as required by the process * inspection or test points (control points) in the process and the related procedures and recording requirements * contamination/food safety risks associated with the process and related control measures * common causes of variation and corrective action required * work health and safety hazards and controls relevant to manufacturing extruded and toasted products * requirements of different shutdowns as appropriate to the 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 * procedures and responsibility for reporting production and performance information * environmental issues and controls relevant to the 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 * cleaning and sanitation procedures for manufacturing extruded and toasted products. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * a workplace or an environment that accurately represents workplace conditions * resources, equipment and materials: * personal protective clothing and equipment * extrusion, toasting and breaking process and related equipment and services * ingredients to be processed * sampling schedules and test procedures and equipment as required * cleaning procedures, materials and equipment as required * specifications: * work procedures, including advice on safe work practices, food safety, quality and environmental requirements * information on equipment capacity and operating parameters * production schedule and recipe/batch instructions * specifications, control points and processing parameters * documentation and 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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