Modification history

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

| FBPOPR2038 | Operate a grinding process |
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| Application | This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a grinding process.  This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a grinding process and associated equipment.  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 grinding processing area | 1.1 Read or listen to work instructions from supervisor and clarify where needed  1.2 Confirm materials are available to meet operating requirements  1.3 Identify and confirm cleaning and maintenance requirements and status according to work health and safety and food safety requirements  1.4 Wear appropriate personal protective clothing and ensure correct fit |
| 2. Prepare the grinding equipment and process for operation | 2.1 Fit and adjust machine components and related attachments to meet operating requirements  2.2 Enter processing and operating parameters as required to meet safety and production requirements  2.3 Check equipment performance and adjust according to production requirements  2.4 Carry out pre-start checks according to work health and safety and operating procedures |
| 3. Operate and monitor the grinding process | 3.1 Start, operate and monitor the grinding process for variation in operating conditions  3.2 Monitor the process to confirm that specifications are met  3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements  3.4 Follow and apply workplace housekeeping and environmental procedures |
| 4. Shut down the grinding process | 4.1 Identify the appropriate shutdown procedure  4.2 Shut down the process according to work health and safety and operating procedures  4.3 Identify and report maintenance requirements according to workplace procedures  4.4 Maintain workplace records according to workplace procedures |

| 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 |
| FBPOPR2038 Operate a grinding process | FDFOP2038A Operate a grinding process | 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 FBPOPR2038 Operate a grinding process |
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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 operated a grinding process on at least one occasion, including:   * accessing workplace information to identify processing requirements * selecting, fitting and using personal protective clothing and/or equipment * confirming supply of necessary materials and services to the grinding 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 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 * operating stockfeed control panel to transfer and grind product * monitoring and adjusting the grinding process and equipment operation to achieve required outcomes, including: * monitoring control points and conducting inspections as required to confirm process remains within specification * running adjustments to hammer mills and roller mills * monitoring supply and flow of materials to and from the grinding 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 * following isolation and lock-out/tag-out procedures as required to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility * completing workplace records as required * sorting, collecting, treating, recycling or disposing of waste * maintaining work area to meet housekeeping standards * cleaning and sanitising equipment according to workplace 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 the grinding process, including the characteristics of materials, which can be reduced to a suitable form for product, including stockfeed * basic operating principles of equipment used to operate the grinding process, including: * main equipment components * bulk materials transfer systems and equipment * dust collection equipment * grinding equipment operating capacities and applications * the purpose and location of magnets, sensors and related feedback instrumentation * services required for the grinding process and action to take if services are not available * basic operating principles of process control, including the relationship between control panels and systems and the physical equipment * the flow of the grinding process and the effect of product output on downstream processes * quality characteristics and uses of grinding process outputs * effect of the grinding process on the end product * effect of raw material characteristics on grinding process performance * operating requirements and parameters and corrective action required where operation is outside specified operating parameters * typical equipment faults related to the grinding process and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems * techniques 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 grinding process and related control measures * common causes of variation for the grinding process and corrective action required * work health and safety hazards and controls related to the grinding process, including: * the risk of dust explosion * an understanding of the limitations of protective clothing and equipment relevant to the work process * 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 required for the operation of the grinding process * 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 * cleaning and sanitation procedures required for the operation of the grinding process. |

| 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 * grinding and related equipment and services * stock required for the grinding process * sampling schedules and test procedures and equipment as required * cleaning procedures, materials and equipment * specifications: * work procedures, including advice on safe work practices, food safety, quality and environmental requirements, stock flow systems, production schedules, batch/recipe instructions * specifications, control points and processing parameters * production schedule/batch instructions * information on equipment capacity and operating 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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