



Australian Government

Department of Education, Employment and Workplace Relations

FDFOP2017A Operate a blending, sieving and bagging process

Revision Number: 1

FDFOP2017A Operate a blending, sieving and bagging process

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to set up, operate, adjust and shut down a blending, sieving and bagging process.
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Application of the Unit

Application of the unit	<p>This unit applies to the process of blending and bagging of dry goods as bulk blends or for use in food service. This process is typically used for the blending and packaging of low moisture products, such as dry flavours and marinades, donut mix, cake mix, bakery ingredients, batters, cheese powders, spice mixes and herb blends. Bag weights typically range from 5 kg to 25 kg.</p> <p>When batch or product changeover procedures are part of this work process, the procedures should be used to customise the application of this unit. Where more detailed changeovers are carried, FDFOP2011A Conduct routine maintenance, should be considered.</p> <p>When applied to the pharmaceutical industry, relevant Good Manufacturing Practice (GMP) codes apply in place of the Australian Food Standards Code and reference to food safety is replaced by GMP.</p>
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<p>1. Prepare the blend, sieve and bagging equipment and process for operation</p>	<p>1.1. Materials are confirmed and available to meet operating requirements</p> <p>1.2. Cleaning and maintenance requirements and status are identified and confirmed</p> <p>1.3. Machine components and related attachments are fitted and adjusted to meet safety and operating requirements</p> <p>1.4. Processing/operating parameters are entered as required to meet production requirements</p> <p>1.5. Materials, ingredients, product and/or consumables are loaded or positioned as required to meet production requirements</p> <p>1.6. Equipment performance is checked and adjusted as required</p> <p>1.7. Pre-start checks are carried out as required by workplace requirements</p>
<p>2. Operate and monitor the blend, sieve and bagging process</p>	<p>2.1. Ingredients are delivered to the blender in the required quantities and sequence to meet recipe specifications</p> <p>2.2. The process is started and operated according to workplace procedures</p> <p>2.3. Equipment is monitored to identify variation in operating conditions</p> <p>2.4. Variation in equipment operation is identified and maintenance requirements are reported according to workplace reporting requirements</p> <p>2.5. The process is monitored to confirm that ingredients are blended, sieved and bagged to meet specifications</p> <p>2.6. Out-of-specification product or process outcomes are identified, rectified and/or reported to maintain the process within specification</p> <p>2.7. The work area is maintained according to housekeeping standards</p> <p>2.8. Work is conducted in accordance with workplace environmental guidelines</p> <p>2.9. Workplace records are maintained according to workplace recording requirements</p>
<p>3. Shut down the blend, sieve and bagging process</p>	<p>3.1. The appropriate shutdown procedure is identified</p> <p>3.2. The process is shut down according to workplace procedures</p>

ELEMENT	PERFORMANCE CRITERIA
	3.3. Maintenance requirements are identified and reported according to workplace reporting requirements

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- access workplace information to identify processing requirements
- select, fit and use personal protective clothing and/or equipment
- confirm supply of necessary packaging components/consumables, materials and services
- conduct pre-start checks, such as inspecting equipment condition to identify any signs of wear, selecting appropriate settings and/or related parameters, cancelling isolation or lockouts as required, confirming that related equipment is clean and correctly configured for processing requirements, positioning sensors and controls correctly, any ensuring scheduled maintenance has been completed and all safety guards are in place and operational
- start, operate, monitor and adjust process equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm process remains within specification, such as:
 - characteristics of blend
 - flow to sieves
 - sieve/screen condition
 - supply of packaging components/consumables
 - integrity of finished seals (stitching or thermal)
- monitor and regulate the supply and flow of materials to and from the process
- take corrective action in response to out-of-specification results
- respond to and/or report equipment failure within level of responsibility
- locate emergency stop functions on equipment
- follow 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
- demonstrate batch/product changeovers
- complete workplace records as required
- maintain work area to meet housekeeping standards
- use process control systems according to enterprise procedures
- collect samples and conduct tests according to enterprise procedures
- clean and sanitise equipment according to enterprise procedures
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

REQUIRED SKILLS AND KNOWLEDGE

Required knowledge

Knowledge of:

- purpose and basic principles of the process, including the method and sequence of ingredient addition required to achieve required blend characteristics
- the purpose of packaging and properties required of packaging materials used, coding requirements and related legal requirements, including product weight
- basic operating principles of equipment, such as main equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of this process and the effect of outputs on downstream processes
- quality characteristics required of process outputs, such as packaging quality and seal integrity as required
- effect of variation in inputs, such as ingredient quality/condition, packaging components/consumables and/or services, 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 and early warning signs of potential problems, such as sieve or screen damage
- methods used to monitor the process, such as monitoring blend characteristics and weights
- 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, including product compatibility, cross-contamination risks and associated cleaning requirements
- common causes of variation and corrective action required, including procedures to manage the reprocessing (return to blend) of the first part of the blend to minimise non-conforming output
- occupational health and safety (OHS) hazards and controls
- requirements of different shutdowns as appropriate to the process and workplace production/packaging requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- product/batch changeover procedures and responsibilities
- 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

REQUIRED SKILLS AND KNOWLEDGE

- relationship between control panels and systems and the physical equipment
- sampling and testing associated with process monitoring and control where relevant
- cleaning and sanitation procedures where relevant

Evidence Guide

EVIDENCE GUIDE	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<p>Overview of assessment</p>	<p>Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.</p>
<p>Critical aspects for assessment and evidence required to demonstrate competency in this unit</p>	<p>Evidence of ability to:</p> <ul style="list-style-type: none"> • conduct pre-start checks on machinery used for blending, sieving and bagging • start, operate, monitor and adjust process equipment to achieve required quality outcomes • take corrective action in response to typical faults and inconsistencies • complete workplace records as required • apply safe work practices and identify OHS hazards and controls • safely shut down equipment • apply food safety procedures.
<p>Context of and specific resources for assessment</p>	<p>Assessment must occur in a real or simulated workplace where the assessee has access to:</p> <ul style="list-style-type: none"> • personal protective clothing and equipment • work procedures, including advice on safe work practices, food safety, quality and environmental requirements • information on equipment capacity and operating parameters • production schedule/batch instructions • specifications, control points and operating parameters • blending, sieving and bagging equipment and services • materials to be processed and packaging components/consumables as required • sampling schedules and test procedures and equipment as required • documentation and recording requirements and procedures

EVIDENCE GUIDE	
	<ul style="list-style-type: none"> cleaning procedures, materials and equipment as required.
Method of assessment	<p>This unit should be assessed together with core units and other units of competency relevant to the function or work role. Examples could be:</p> <ul style="list-style-type: none"> FDFOP2004A Clean and sanitise equipment FDFOP2011A Conduct routine maintenance FDFOP2013A Apply sampling procedures FDFOP2030A Operate a process control interface MSL973001A Perform basic tests.
Guidance information for assessment	<p>To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.</p>

Range Statement

RANGE STATEMENT	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
Policies and procedures	<p>Work is carried out according to company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements</p>
Legislative requirements	<p>Legislative requirements are typically reflected in procedures and specifications. Legislation relevant to this industry includes:</p> <ul style="list-style-type: none"> • the Food Standards Code, including labelling, weights and measures legislation • legislation covering food safety, environmental management, OHS, anti-discrimination and equal opportunity <p>Special product requirements include:</p> <ul style="list-style-type: none"> • Halal and Kosher licence
Workplace information	<p>Workplace information may include:</p> <ul style="list-style-type: none"> • standard operating procedures (SOPs) • specifications • production schedules and instructions • manufacturers' advice • standard forms and reports
Equipment	<p>Equipment typically includes:</p> <ul style="list-style-type: none"> • ribbon and vertical blenders • sieves, including rotary and shaker sieves • net weighers • gross baggers • sew and crepe machines • heat sealers <p>The sieving stage may occur before and/or after blending</p>
Ingredients	<p>Ingredients may be delivered to the process using</p>

RANGE STATEMENT	
	bulk automated materials handling equipment or loaded manually
Operation of equipment and processes	Operation of equipment and processes may require: <ul style="list-style-type: none"> the use of process control panels and systems
Shut down procedures	Shut down procedures may include: <ul style="list-style-type: none"> cleaning (in some cases cleaning may be carried out by a dedicated cleaning crew)
Services	Services may need to be confirmed. These depend on the nature of the process. Typical examples include: <ul style="list-style-type: none"> power steam water vacuum compressed and instrumentation air

Unit Sector(s)

Unit sector	Operational
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Competency field

Competency field	
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Co-requisite units

Co-requisite units	

