



**AUSTRALIAN
NATIONAL TRAINING
AUTHORITY**

Food Processing Industry

FDF 98

General Foods Competency Units

**NATIONAL FOOD INDUSTRY
TRAINING COUNCIL**

Qualification	Code
Certificate III in Food Processing	FDF30198
Certificate II in Food Processing	FDF20198
Certificate I in Food Processing	FDF10198

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Published by: Australian Training Products Ltd
GPO Box 5347BB
MELBOURNE VIC 3001
Telephone: +61 3 9630 9836 or 9630 9837
Facsimile: +61 3 9639 4684

First Published: November 1998

STOCKCODE; 4820010STD

Printed by Document Printing Australia Pty Ltd, MELBOURNE AUSTRALIA

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FDF GFDC1 A	Locate industry and company products and processes (General Foods)
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Descriptor This is a specialist unit that has been customised for the general foods sector. It covers the products and processes used in the workplace.

Range of variables

The range of variables provides further advice to interpret the scope and context of this unit of competence. It assumes:

- Processes and procedures are carried out within company policy and procedures and legislative requirements
- General foods processes typically include blending and mixing, equipment, process or system set up and operation, packing and warehousing
- Stages refer to functions or activities in the production, packaging and despatch processes. Examples of typical stages are mixing, cooking, extruding, homogenising, packing, storing and despatching

Element	Performance criteria	Evidence guide – Part A
Identify products and quality requirements	Company product range is identified Quality requirements of final products are identified in accord with company specifications	Part A of the Evidence guide identifies the knowledge to be demonstrated to confirm competence for this unit. Part B of the Evidence guide outlines how this guide is to be applied. It should be read in conjunction with the Range of variables. Demonstrated ability to: <ul style="list-style-type: none"> – access workplace information to identify materials and production requirements – identify and locate materials used in the work process – identify and locate production and/or packaging stages and process in the workplace – comply with OHS and food safety requirements when moving around the workplace
Identify and locate production and packaging processes	Raw materials and related handling systems are located and operated as required Production and packaging stages and processes are identified Equipment used for each stage is located	<ul style="list-style-type: none"> – access workplace information to identify materials and production requirements – identify and locate materials used in the work process – identify and locate production and/or packaging stages and process in the workplace – comply with OHS and food safety requirements when moving around the workplace Underpinning knowledge: <ul style="list-style-type: none"> – range of final products produced by the company – quality requirements/specifications for final products – consequences of product failing to meet quality requirements – stages and processes used to manufacture and package product – basic purpose of equipment used at each stage – outputs at each stage of the process – raw materials/consumables used <i>(cont)</i>

Element	Performance criteria	Evidence guide – Part A
		<p><i>Underpinning knowledge: (continued)</i></p> <ul style="list-style-type: none"> – preparation, packaging, handling and storage of finished product prior to sale – OHS, quality, food safety and environmental requirements relating to own work

Evidence guide – Part B

Assessment guide

- Assessment must take account of the food industry’s endorsed assessment guidelines and may use the non-endorsed *Assessment Framework for the Food and Beverage Processing Industry NFITC June 1995*.
- The competencies described in this unit need to be performed over a specified time and events, under normal workplace conditions, having due regard for the key assessment principles of validity, reliability, fairness and flexibility.
- Assessment should be structured on whole of work activities giving emphasis to confirming that the assessee can achieve the workplace outcomes described in the Performance criteria, including demonstration of the underpinning knowledge and skills contained in the Evidence guide.
- The equipment used should be the actual items described in the Range of variables and Assessment context.
- The procedures and documentation should be those typically used in a workplace. Compliance with statutory occupational health and safety, food safety, hygiene and environmental requirements relevant to the food processing industry should be emphasised.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.
- Assessment should reinforce the integration of the key competencies and the food industry’s core competencies for the particular AQF level.

Assessment context

Assessment must occur in a real or simulated workplace. Such an environment must provide an opportunity for the assessee to describe general foods products and processes given:

- work procedures including advice on safe work practices, food safety and environmental requirements
- production systems, stages and processes
- raw materials, in-process and finished product requirements and/or specifications

Relationship to other units

Co-requisites:

- Communicate in the workplace
- Apply basic mathematical concepts
- Apply safe work procedures
- Apply basic quality assurance practices
- Apply basic food safety practices

Relationship to learning resources

Main learning resources:

- Introduction to General Foods Manufacture

Related learning resources:

- Industrial Communication A

- Calculations A
- Occupational Health & Safety A
- Quality Assurance A
- Food Safety A (Hygiene and Sanitation A)

Descriptor This is a specialist unit that applies to all sectors of the food processing industry. It includes manual packing into inner and outer packaging.

Range of variables

This range of variables provides further advice to interpret the scope and context this unit of competence. It assumes that:

- Work is carried out in accordance with company procedures, licensing requirements, legislative requirements and industrial awards and agreements
- Work is typically conducted in a packing work area
- Packing can include hand wrapping and placement of product into inner and outer packaging
- Packing may be into outer or inner packaging and can include but is not limited to boxes, tubs, liners, trays and foils
- Packed product may be stacked and wrapped according to requirements
- Product feed may be mobile or stationary

Element	Performance criteria	Evidence guide – Part A
Manually pack product	Product is packed to meet customer and order specifications	<p>Part A of the Evidence guide identifies the skills and knowledge to be demonstrated to confirm competence for this unit. Part B of the Evidence guide outlines how this guide is to be applied. Both parts should be read in conjunction with the Range of variables.</p> <p>Demonstrated ability to:</p> <ul style="list-style-type: none"> – access workplace information to identify packing requirements. This can include wrapping, placement and general packing advice – confirm that packaging consumables are appropriate for product type – confirm that product is in correct condition to pack – confirm packing/package requirements. This can include checking codes, dates and weight settings – pace work to meet production requirements – complete relevant workplace records as required – stack or place product as required. This can include following stacking configurations. – sort and collect waste for disposal – maintain work area to meet housekeeping standards <p>May include the ability to:</p> <ul style="list-style-type: none"> – operate basic wrapping equipment such as shrink wrapping, banding and strappers

Element	Performance criteria	Evidence guide – Part A
		<p>Underpinning knowledge:</p> <ul style="list-style-type: none"> – packaging materials and consumables used for each product type – packaging and/or wrapping and/or placement procedures – consequences of incorrect procedures or configuration – specifications for packing/packaging product and pallets and other equipment as required. This includes identifying any special packing/packaging requirements. – OHS hazards and controls, including manual handling – pallet identification and management system where relevant – environmental aspects, impacts and controls – housekeeping requirements – waste types, collection and disposal requirements – consequences of incorrect waste disposal <p>May include knowledge of:</p> <ul style="list-style-type: none"> – basic wrapping equipment preparation and operation

Evidence guide – Part B

Assessment guide

- Assessment must take account of the food industry's endorsed assessment guidelines and may use the non-endorsed *Assessment Framework for the Food and Beverage Processing Industry NFITC June 1995*.
- The competencies described in this unit need to be performed over a specified time and events, under normal workplace conditions, having due regard for the key assessment principles of validity, reliability, fairness and flexibility.
- Assessment should be structured on whole of work activities giving emphasis to confirming that the assessee can achieve the workplace outcomes described in the Performance criteria, including demonstration of the underpinning knowledge and skills contained in the Evidence guide.
- The equipment used should be the actual items described in the Range of variables and Assessment context.
- The procedures and documentation should be those typically used in a workplace. Compliance with statutory occupational health and safety, food safety, hygiene and environmental requirements relevant to the food processing industry should be emphasised.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.
- Assessment should reinforce the integration of the key competencies and the food industry's core competencies for the particular AQF level.

Assessment context

Assessment of this unit must occur in a real or simulated workplace. Such an environment must provide an opportunity for the assessee to manually pack into inner and outer packaging given:

- work procedures including advice on safe work practices and food safety requirements
- packing/package specifications
- packaging consumables
- product to be packed
- related equipment as required such as pallets or trolleys
- record keeping system

Relationship to other units

Co-requisites:

- Communicate in the workplace
- Apply basic mathematical concepts
- Apply safe work procedures
- Apply basic quality assurance practices
- Apply basic food safety practices

Related Units:

- Use manual handling equipment
- Shift materials safely

Relationship to learning resources

Main learning resource:

- Packaging A

Related learning resources

- Materials Handling A
- Industrial Communication A
- Calculations A
- Occupational Health and Safety A
- Quality Assurance A
- Food Safety A (Hygiene and Sanitation A)

FDZ ZZMB2 A**Operate a mixing/blending process****Descriptor**

This is a specialist unit that applies to the general foods, biscuit and dairy sectors. It covers both mixing and blending of ingredients and typically requires the operation of weighing, mixing and/or blending equipment.

Range of variables

The range of variables provides further advice to interpret the scope and context of this unit of competence. It assumes:

- Work is carried out in accordance with company procedures, licensing requirements, legislative requirements and industrial awards and agreements
- Workplace information can include Standard Operating Procedures (SOPs), specifications, production schedules and batch/recipe instructions
- Mixing/blending equipment may include tumbler mixers, trough mixers, ribbon mixers, vertical screw mixers, agitators, baffles, blade paddles, impellers, churns
- Materials may include bulk and non-bulk, wet and dry raw materials, ingredients and additives
- Pre-mixing stages may involve preparation of dry mixes, solutions, colloids, emulsions, dispersions, suspensions, pastes
- Confirming equipment status involves checking that hygiene and sanitation standards are met, all safety guards are in place and equipment is operational. It may also involve checking operation/calibration of measuring instrumentation such as scales
- Services may include power, water/steam, compressed and instrumentation air
- Monitoring the process may involve the use of production data such as performance control charts
- Weighing, measuring and mixing set up, operation and monitoring functions may be manual or involve the use of a process control system
- Control points refer to those key points in a work process which must be monitored and controlled. This includes food safety (critical), quality and regulatory control points as well as inspection points
- Information systems may be print or screen based
- Work may involve exposure to chemicals, dangerous or hazardous substances

Element	Performance criteria	Evidence guide – Part A
Prepare the mixing/blending process for operation	<p>Materials are confirmed and available to meet production/recipe requirements</p> <p>Materials are weighed or measured to meet recipe requirements</p> <p>Equipment is checked to confirm readiness for use</p> <p>Services are confirmed as available and ready for operation</p> <p>The process is set to meet production requirements</p>	<p>Part A of the Evidence guide identifies the skills and knowledge to be demonstrated to confirm competence for this unit. Part B of the Evidence guide outlines how this guide is to be applied. Both parts should be read in conjunction with the Range of variables.</p> <p>Demonstrated ability to:</p> <ul style="list-style-type: none"> – access workplace information to identify recipe and batch requirements – select, fit and use personal protective clothing and/or equipment – confirm supply of necessary materials and services – liaise with other work areas – conduct batch/product changeover – load materials in correct quantities and sequence – confirm equipment status and condition – set-up and start up equipment to meet mixing/blending requirements

		(cont.)
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Element	Performance criteria	Evidence guide – Part A
Blend materials	<p>The mixing/blending process is started up according to company procedures</p> <p>Materials are added in quantities and sequence specified by recipe/batch instructions</p> <p>Control points are monitored to confirm performance is maintained within specification</p> <p>Blended/mixed product meets specification</p> <p>Equipment is monitored to confirm operating condition</p> <p>Out-of-specification product, process and equipment performance is identified, rectified and/or reported</p>	<p><i>Demonstrated ability to: (continued)</i></p> <ul style="list-style-type: none"> – monitor the mixing/blending process to identify out-of-specification results. This may include monitoring: <ul style="list-style-type: none"> ➢ agitation speed ➢ flow rates/quantities ➢ time/temperature – monitor flow of materials to and from the process – transfer mix to designated location – take corrective action in response to out-of-specification results or non-compliance – report and/or record corrective action as required – sort, collect, treat, recycle or dispose of waste – shut down equipment in response to an emergency situation – shut down equipment in response to routine shut down requirements – prepare equipment for cleaning – maintain workplace records – maintain work area to meet housekeeping standards
Shut down the process	<p>The process is shut down according to company procedures</p> <p>Waste is collected, treated and disposed or recycled according to company procedures</p>	<p>May include the ability to:</p> <ul style="list-style-type: none"> – clean and sanitise equipment – take samples and conduct tests – conduct routine preventative maintenance <p>Underpinning knowledge:</p> <ul style="list-style-type: none"> – purpose and basic principles of the mixing/blending process – link to related processes – basic quality characteristics of ingredients used and effect on process outcome – effect of mixing/blending on the end product – cross contamination risks and consequences. This includes an awareness of common allergens used – recipe and batch specifications, procedures and operating parameters – equipment and instrumentation components purpose and operation – basic operating principles of process control systems where relevant – services used – significance and methods of monitoring control points within the process – common causes of variation and corrective action required – OHS hazards and controls – lock out and tag out procedures – procedures and responsibility for reporting problems – environmental issues and controls – shut down and cleaning requirements associated with changeovers and types of shut downs <p><i>(cont)</i></p>

Element	Performance criteria	Evidence guide – Part A
Record information	Workplace information is recorded in the appropriate format	<p><i>Underpinning knowledge (continued)</i></p> <ul style="list-style-type: none"> – waste handling requirements and procedures <p>May include:</p> <ul style="list-style-type: none"> – cleaning and sanitation procedures – sampling and testing procedures – routine maintenance procedures

Evidence guide – Part B

Assessment guide

- Assessment must take account of the food industry's endorsed assessment guidelines and may use the non-endorsed *Assessment Framework for the Food and Beverage Processing Industry NFITC June 1995*.
- The competencies described in this unit need to be performed over time and events, under normal workplace conditions, having due regard for the key assessment principles of validity, reliability, fairness and flexibility.
- Assessment should be structured on whole of work activities giving emphasis to confirming that the assessee can achieve the workplace outcomes described in the Performance criteria, including demonstration of the underpinning knowledge and skills contained in the Evidence guide.
- The equipment used should be the actual items described in the Range of variables and Assessment context.
- The procedures and documentation should be those typically used in a workplace. Compliance with statutory occupational health and safety, food safety, hygiene and environmental requirements relevant to the food processing industry should be emphasised.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.
- Assessment should reinforce the integration of the key competencies and the food industry's core competencies for the particular AQF level.

Assessment context

Assessment of this unit must occur in a real or simulated workplace. Such an environment must provide an opportunity for the assessee to prepare and mix/blend ingredients given:

- work procedures including advice on safe work practices, food safety and environmental requirements
- recipe and batch instructions
- production schedule
- specifications, control points and operating parameters
- mixing/blending equipment
- materials to be blended or mixed
- materials handling/bulk movement system for addition of materials to mixing/blending process
- services as required
- related work areas and communication system
- material safety data sheets where appropriate
- relevant OHS clothing and equipment
- cleaning schedule as required
- routine maintenance schedule as required
- documentation and recording requirements and procedures

Relationship to other units

Pre-requisites or equivalent:

- Communicate in the workplace
- Apply basic mathematical concepts
- Apply safe work procedures
- Apply basic quality assurance practices
- Apply basic food safety practices

Co-requisites:

- Collect, present and apply workplace information
- Implement occupational health and safety principles and procedures
- Implement the quality system
- Implement the food safety plan

Related units:

- Clean and sanitise equipment
- Conduct routine preventative maintenance

Where related units are required to support preparation and mixing responsibilities in the workplace, units should be co-assessed.

Relationship to learning resources

Main learning resource:

- General Foods Materials Preparation
- Mixing/Blending (Dairy)

Related learning resources:

- Industrial Communication B
- Occupational Health and Safety B
- Quality Assurance B
- Food Safety B (Hygiene and Sanitation B and C)
- Cleaning and Sanitation

Descriptor

This is a specialist unit that has been developed for the general foods sector. It covers the preparation and operation of a unit of equipment. A unit describes a single item of equipment and would not typically involve concurrent set up and operation of related equipment. It would usually require limited adjustment within guidelines or instructions.

Range of variables

The range of variables provides further advice to interpret the scope and context of this unit of competence. It assumes:

- Work is carried out in accordance with company procedures and legislative requirements
- A unit is a relatively simple item of equipment such as simple mixing, blending, filling or labeling equipment requiring minimal adjustment
- Workplace information may include Standard Operating Procedures (SOPs), specifications, production schedules and batch/recipe instructions
- Confirming equipment status involves checking that hygiene and sanitation standards are met, all safety guards are in place and equipment is operational
- Control points refer to those key points in a work process which must be monitored and controlled. This includes food safety (critical), quality and regulatory control points as well as inspection points
- Information systems may be print or screen based
- Work may involve exposure to chemicals, dangerous or hazardous substances

Element	Performance criteria	Evidence guide – Part A
Prepare the process for operation	<p>Materials are confirmed and available to meet production/recipe requirements</p> <p>Materials and/or packaging consumables are loaded</p> <p>Services are confirmed as available and ready for operation</p> <p>Equipment is checked to confirm readiness for use</p> <p>The process is set to meet production requirements</p>	<p>Part A of the Evidence guide identifies the skills and knowledge to be demonstrated to confirm competence for this unit. Part B of the Evidence guide outlines how this guide is to be applied. Both parts should be read in conjunction with the Range of variables.</p> <p>Demonstrated ability to:</p> <ul style="list-style-type: none"> - access workplace information to identify production requirements - select, fit and use personal protective clothing and equipment - confirm supply of necessary materials and services. - liaise with other work areas - inspect and load items such as materials and packaging consumables - confirm equipment status and condition - conduct batch/product changeovers - set-up and start up the item of equipment - monitor the process as required - monitor supply and flow of materials to and from the process - take corrective action in response to out-of-specification results or non-compliance - record and/or report corrective action - sort, collect, treat, recycle or dispose of waste - shut down equipment in response to an emergency situation (<i>cont.</i>)

Element	Performance criteria	Evidence guide – Part A
Operate and monitor the process	<p>The process is started up according to company procedures</p> <p>Control points are monitored to confirm performance within specification</p> <p>Product meets specification</p> <p>Equipment is monitored to confirm operating condition</p> <p>Out-of-specification product, process and equipment performance is identified, rectified and/or reported</p>	<p><i>Demonstrated ability to: (continued)</i></p> <ul style="list-style-type: none"> – shut down equipment in response to routine shut down requirements – prepare equipment for cleaning – maintain workplace records – maintain work area to meet housekeeping standards <p>May include the ability to:</p> <ul style="list-style-type: none"> – clean and sanitise of equipment <p>Underpinning knowledge:</p> <ul style="list-style-type: none"> – purpose of the item of equipment – link to related processes – required output – process specifications, procedures and operating parameters – materials preparation requirements – services used – significance and method of monitoring control points within the process
Shut down the process	<p>The process is shut down according to company procedures</p> <p>Waste is collected, treated and disposed or recycled according to company procedures</p>	<ul style="list-style-type: none"> – OHS hazards and controls – lock out and tag out procedures – procedures and responsibility for reporting problems – environmental issues and controls – cleaning requirements associated with changeovers and types of shut downs – waste handling requirements and procedures – recording requirements and procedures
Record information	<p>Workplace information is recorded in the appropriate format</p>	<p>May include knowledge of:</p> <ul style="list-style-type: none"> – cleaning and sanitation requirements and procedures

Evidence guide – Part B

Assessment guide

This Assessment guide supports the application of the elements, performance criteria and evidence guide. It should be read in conjunction with the Range of variables.

- Assessment must take account of the food industry's endorsed assessment guidelines and may use the non-endorsed Assessment Framework for the Food and Beverage Processing Industry NFITC June 1995.
- The competencies described in this unit need to be performed over time and events, under normal workplace conditions, having due regard for the key assessment principles of validity, reliability, fairness and flexibility.
- Assessment should be structured on whole of work activities giving emphasis to confirming that the assessee can achieve the workplace outcomes described in the Performance criteria, including demonstration of the underpinning knowledge and skills contained in the Evidence guide.
- The equipment used should be the actual items described in the Range of variables and Assessment context.
- The procedures and documentation should be those typically used in a workplace. Compliance with statutory occupational health and safety, food safety, hygiene and environmental requirements relevant to the food processing industry should be emphasised.

- Assessment should reinforce the integration of the key competencies and the food industry's core competencies for the particular AQF level.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.

Assessment context

Assessment of this unit must occur in a real or simulated workplace. Such an environment must provide an opportunity for the assessee to prepare operate a unit of equipment given:

- work procedures including advice on safe work practices, food safety and environmental requirements
- production schedule
- specifications, control points and processing parameters
- unit of equipment
- services as required
- related work areas and communication system
- materials and/or packaging consumables as required
- material safety data sheets where appropriate
- relevant OHS clothing and equipment
- cleaning schedule as required
- documentation and recording requirements and procedures

Relationship to other units

Pre-requisites or equivalent:

- Communicate in the workplace
- Apply basic mathematical concepts
- Apply safe work procedures
- Apply basic quality assurance practices
- Apply basic food safety practices

Co-requisites:

- Collect, present and apply workplace information
- Implement occupational health and safety principles and procedures
- Implement the quality system
- Implement the food safety plan

Related units:

- Clean and sanitise equipment

Where related units are required to support preparation and operation of a unit of equipment in the workplace, units should be co-assessed.

Relationship to learning resources

Main learning resource:

- General Foods Unit Preparation and Operation

Related learning resources:

- Industrial Communication B
- Occupational Health and Safety B
- Quality Assurance B
- Food Safety B (Hygiene and Sanitation B and C)

Operate a unit of production equipment

– Cleaning and Sanitation

Descriptor	<p>This is a specialist unit that has been developed for the general foods sector. It covers the preparation and operation of a sub-system. A sub-system typically requires the co-ordination of a series of items of equipment or components. It is distinguished from a unit by:</p> <ul style="list-style-type: none"> • increased complexity of equipment, requiring more complex adjustment • requirement to co-ordinate a number of items or equipment • requirement to troubleshoot within the process • possible requirement to co-ordinate with related processes.
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Range of variables

The range of variables provides further advice to interpret the scope and context of this unit of competence. It assumes:

- Work is carried out in accordance with company procedures, licensing requirements, legislative requirements and industrial awards and agreements
- Workplace information may include Standard Operating Procedures (SOPs), specifications, production schedules and batch/recipe instructions
- A sub-system is more complex and requires more complex adjustments and monitoring than for a unit. Examples of sub-systems may include cooking, extruding, heat treatment and more complex mixing, blending, filling, form, fill and seal labeling and other packaging/packing equipment
- Confirming equipment status involves checking that hygiene and sanitation standards are met, all safety guards are in place and equipment is operational. It may also involve checking operation/calibration of measuring instrumentation
- Services may include power, water/steam, compressed and instrumentation air and refrigerant
- Control points refer to those key points in a work process which must be monitored and controlled. This includes food safety (critical), quality and regulatory control points as well as inspection points
- Work may involve exposure to chemicals
- Information systems may be print or screen based

Element	Performance criteria	Evidence guide – Part A
Prepare the process for operation	<p>Materials are confirmed and available to meet production/recipe requirements</p> <p>Materials and/or packaging consumables are prepared to meet production requirements</p> <p>Services are confirmed as available and ready for operation</p> <p>Equipment is checked to confirm readiness for use</p> <p>The process is set to meet production requirements</p>	<p>Part A of the Evidence guide identifies the skills and knowledge to be demonstrated to confirm competence for this unit. Part B of the Evidence guide outlines how this guide is to be applied. Both parts should be read in conjunction with the Range of variables.</p> <p>Demonstrated ability to:</p> <ul style="list-style-type: none"> – access workplace information to identify production requirements – select, fit and use personal protective clothing and/or equipment – confirm supply of necessary materials and services – liaise with other work areas. – confirm equipment status and condition – conduct batch/product changeover – set-up and start up the process – monitor the process and equipment operation to identify out-of-specification results or non-compliance (<i>cont</i>)

Element	Performance criteria	Evidence guide –Part A
Operate and monitor the process to meet specifications	<p>The process is started up according to company procedures</p> <p>Control points are monitored to confirm performance is maintained within specification</p> <p>Product meets specification</p> <p>Equipment is monitored to confirm operating condition</p> <p>Out-of-specification product, process and equipment performance is identified, rectified and/or reported</p>	<p><i>Demonstrated ability to: (continued)</i></p> <ul style="list-style-type: none"> – monitor supply and flow of materials to and from the process – take corrective action in response to out-of-specification results or non-compliance – report and/or record corrective action – sort, collect, treat, recycle or dispose of waste – shut down equipment in response to an emergency situation – shut down equipment in response to routine shut down requirements. – prepare equipment for cleaning – record workplace information – maintain work area to meet housekeeping standards <p>May include the ability to:</p> <ul style="list-style-type: none"> – clean and sanitise equipment – take samples and conduct test – carry out routine maintenance
Shut down the process	<p>The process is shut down according to company procedures</p> <p>Waste is collected, treated and disposed or recycled according to company procedures</p>	<p>Underpinning knowledge:</p> <ul style="list-style-type: none"> – purpose and basic principles of the process – link to related processes – process specifications, procedures and operating parameters – equipment and instrumentation components, purpose and operation – material preparation requirements – basic operating principles of process control systems where relevant – services used – common causes of variation and corrective action required – significance and method of monitoring control points within the process – OHS hazards and controls – lock out and tag out procedures – procedures and responsibility for reporting problems – environmental issues and controls – shut down and cleaning requirements associated with changeovers and types of shut downs – waste handling requirements and procedures – recording requirements and procedures
Record information	Workplace information is recorded in the appropriate format	<p>May include:</p> <ul style="list-style-type: none"> – cleaning and sanitation and procedures – sampling and testing procedures – routine maintenance procedures

Evidence guide – Part B

Assessment guide

- Assessment must take account of the food industry's endorsed assessment guidelines and may use the non-endorsed *Assessment Framework for the Food and Beverage Processing Industry NFITC June 1995*.
- The competencies described in this unit need to be performed over time and events, under normal workplace conditions, having due regard for the key assessment principles of validity, reliability, fairness and flexibility.
- Assessment should be structured on whole of work activities giving emphasis to confirming that the assessee can achieve the workplace outcomes described in the Performance criteria, including demonstration of the underpinning knowledge and skills contained in the Evidence guide.
- The equipment used should be the actual items described in the Range of variables and Assessment context.
- The procedures and documentation should be those typically used in a workplace. Compliance with statutory occupational health and safety, food safety, hygiene and environmental requirements relevant to the food processing industry should be emphasised.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.
- Assessment should reinforce the integration of the key competencies and the food industry's core competencies for the particular AQF level.

Assessment context

Assessment of this unit must occur in a real or simulated workplace. Such an environment must provide an opportunity for the assessee to co-ordinate of a series of items of equipment or components given:

- work procedures including advice on safe work practices, food safety and environmental requirements
- production schedule
- material safety data sheets where appropriate
- sampling, and testing schedules where appropriate
- specifications, control points and processing parameters
- sub-system equipment. This may include materials handling equipment.
- services
- materials and/or packaging consumables
- relevant OHS clothing and equipment
- related work areas and communication system
- routine preventative maintenance schedule as required
- cleaning schedule as required
- documentation and recording requirements and procedures

Relationship to other units

Pre-requisites or equivalent:

- Communicate in the workplace
- Apply basic mathematical concepts
- Apply safe work procedures
- Apply basic quality assurance practices
- Apply basic food safety practices

Co-requisites:

- Collect, present and apply workplace information
- Implement occupational health and safety principles and procedures
- Implement the quality system

- Implement the food safety plan

Related units:

- Conduct routine tests
- Apply sampling techniques
- Clean and sanitise equipment
- Conduct routine preventative maintenance

Where related units are required to support operation of a sub-system in the workplace, units should be co-assessed.

Relationship to learning resources

Main learning resource:

- General Foods Sub-system Preparation and Operation

Related learning resources:

- Industrial Communication B
- Occupational Health and Safety B
- Quality Assurance B
- Food Safety B (Hygiene and Sanitation B and C)
- Cleaning and Sanitation

FDZ ZZPP2 A
Operate a packaging process
Descriptor

This is a specialist unit that applies to all sectors of the food processing industry. It involves the preparation and operation of packaging and related equipment to pack into inner and outer packaging.

Range of variables

The range of variables provides further advice to interpret the scope and context of this unit of competence. It assumes:

- Work is carried out in accordance with company procedures, licensing requirements, legislative requirements and industrial awards and agreements
- Workplace information can include Standard Operating Procedures (SOPs), specifications, production schedules and batch/recipe instructions
- Materials include product and packaging consumables
- Packaging and related equipment can include automatic palletisers, scales, labellers and other automated packing equipment. It includes hot and cold packing methods
- Monitoring the process may involve the use of production data such as performance control charts
- Process set up, operation and monitoring functions may be manual or involve the use of a process control system
- Control points refer to those key points in a work process which must be monitored and controlled. This includes food safety (critical), quality and regulatory control points as well as inspection points
- Information systems may be print or screen based

Element	Performance criteria	Evidence guide – Part A
Prepare the process for operation	Materials and/or packaging consumables are prepared for the packing process Services are confirmed as available and ready for operation Equipment is checked to confirm readiness for use The process is set to meet specifications	Part A of the Evidence guide identifies the skills and knowledge to be demonstrated to confirm competence for this unit. Part B of the Evidence guide outlines how this guide is to be applied. Both parts should be read in conjunction with the Range of variables. Demonstrated ability to: <ul style="list-style-type: none"> – access workplace information to identify packaging and/or stacking requirements – select, fit and use personal protective clothing and/or equipment – confirm supply and condition of necessary materials and services – liaise with other work areas – confirm equipment status and condition – set-up and start up equipment. This can include selecting and setting equipment to meet packaging and/or stacking requirements. It may also include setting variables such as weights and batch codes and expiry dates as required – monitor the process to identify out-of-specification results or non-compliance. This may include maintaining levels of materials and/or consumables and visual inspection of packaging quality <i>(cont.)</i>

Element	Performance criteria	Evidence guide – Part A
Operate and monitor the packing process	<p>The process is started up according to company procedures</p> <p>Control points are monitored to confirm performance within specification</p> <p>Packaged product meets specification</p> <p>Equipment is monitored to confirm operating condition</p> <p>Out-of-specification product, process and equipment performance is identified, rectified and/or reported</p>	<p><i>Demonstrated ability to: (continued)</i></p> <ul style="list-style-type: none"> – take corrective action in response to out-of-specification results or non-compliance – conduct line changeover – sort, collect, treat, recycle or dispose of waste – report and/or record corrective action as required – shut down equipment in response to an emergency situation – shut down equipment in response to routine shut down requirements – prepare equipment for cleaning – record workplace information – maintain work area to meet housekeeping standards <p>May include the ability to:</p> <ul style="list-style-type: none"> – clean and sanitise equipment – take samples and conduct test – conduct routine maintenance
Shut down the packaging process	<p>The process is shut down according to company procedures</p> <p>Waste is collected, treated and disposed or recycled according to company procedures</p>	<p>Underpinning knowledge:</p> <ul style="list-style-type: none"> – purpose and principles of packaging methods used – link between this and related processes – quality and legal requirements of packaging – stacking or packaging specifications, procedures and operating parameters
Record information	Workplace information is recorded in the appropriate format	<ul style="list-style-type: none"> – equipment purpose and operation. This includes an understanding of operating principles for common packing equipment such as form-fill and seal, cartoning, labeling, vacuum sealing, heat shrink wrapping, palletising – materials used. This includes an understanding of the purpose and properties of packaging consumables used such as rewind or film, glue, cardboard, cartons and other forms of inner and outer packaging – process requirements. This includes an understanding of both quality and legal requirements for packaged product, for example weight, date codes and labeling requirements. It also covers to printing standards and documentation – significance and method of monitoring control points within the process – risk of product contamination from inappropriate or incorrect use of packaging consumables – OHS hazards and controls – lock out and tag out procedures – environmental issues and controls – environmental aspects, impacts and controls <p>(cont.)</p>

Element	Performance criteria	Evidence guide – Part A
		<p><i>Underpinning knowledge: (continued)</i></p> <ul style="list-style-type: none"> – shut down and cleaning requirements associated with changeovers and types of shut downs – waste generated by process and cleaning operations and collection, treatment and handling requirements according to waste management plan – recording requirements and procedures <p>May include:</p> <ul style="list-style-type: none"> – cleaning and sanitation procedures – sampling and testing procedures – routine maintenance procedures

Evidence guide – Part B

Assessment guide

- Assessment must take account of the food industry's endorsed assessment guidelines and may use the non-endorsed *Assessment Framework for the Food and Beverage Processing Industry NFITC June 1995*.
- The competencies described in this unit need to be performed over time and events, under normal workplace conditions, having due regard for the key assessment principles of validity, reliability, fairness and flexibility.
- Assessment should be structured on whole of work activities giving emphasis to confirming that the assessee can achieve the workplace outcomes described in the Performance criteria, including demonstration of the underpinning knowledge and skills contained in the Evidence guide.
- The equipment used should be the actual items described in the Range of variables and Assessment context.
- The procedures and documentation should be those typically used in a workplace. Compliance with statutory occupational health and safety, food safety, hygiene and environmental requirements relevant to the food processing industry should be emphasised.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.
- Assessment should reinforce the integration of the key competencies and the food industry's core competencies for the particular AQF level.

Assessment context

Assessment of this unit must occur in a real or simulated workplace. Such an environment must provide an opportunity for the assessee to prepare and operate a packaging process given:

- work procedures including advice on safe work practices, food safety and environmental requirements
- packaging schedule
- packaging specifications, pallet configuration advice, control points and operating parameters
- sampling and testing schedules where appropriate
- stacking and packing/packaging equipment
- services as required
- product and/or packaging consumables as required
- relevant OHS clothing and equipment
- cleaning schedule as required
- routine preventative maintenance and equipment calibration schedule as required
- documentation and record keeping system

Relationship to other units

Pre-requisites or equivalent:

- Communicate in the workplace
- Apply basic mathematical concepts
- Apply safe work procedures
- Apply basic quality assurance practices
- Apply basic food safety practices

Co-requisites:

- Collect, present and apply workplace information
- Implement occupational health and safety principles and procedures
- Implement the quality system
- Implement the food safety plan

Related units:

- Conduct routine tests
- Apply sampling techniques
- Clean and sanitise equipment
- Conduct routine preventative maintenance

Where related units are required to operate a packaging process in the workplace, units should be co-assessed.

Relationship to learning resources

Main learning resource:

- Packaging B and C

Related learning resources:

- Industrial Communication B
- Occupational Health and Safety B
- Quality Assurance B
- Food Safety B (Hygiene and Sanitation B and C)
- Cleaning and Sanitation

FDF GFOS3 A

Operate a system (General Foods)**Descriptor**

This is a specialist unit that has been customised for the general foods sector. It covers the preparation and operation of a production or packaging system.

A system typically describes the operation of an entire process which may be comprised of a number of sub-systems. System operation requires higher level planning and problem solving skills than are necessary when operating an individual sub-system or piece of equipment. It can also involve facilitating the work of others.

Range of variables

The range of variables provides further advice to interpret the scope and context of this unit of competence. It assumes:

- Work is carried out in accordance with company procedures, licensing requirements, legislative requirements and industrial awards and agreements
- System operation typically involves planning, co-ordination and troubleshooting within their level of authority
- Control points refer to those key points in a work process which must be monitored and controlled. This includes food safety (critical), quality and regulatory control points as well as inspection points
- Information systems may be print or screen based
- Co-ordination, planning and troubleshooting is undertaken with assistance from others
- Workplace systems are in place to support production and packaging processes. These include quality, food safety, occupational health and safety and environmental management

Element	Performance criteria	Evidence guide – Part A
Prepare the system for operation	<p>Supply of materials is confirmed to meet production/packaging requirements</p> <p>Work area is prepared for operation</p> <p>Services are confirmed as available and ready for operation</p> <p>Equipment is checked to confirm readiness for use</p> <p>The system is set to meet specifications</p>	<p>Part A of the Evidence guide identifies the skills and knowledge to be demonstrated to confirm competence for this unit. Part B of the Evidence guide outlines how this guide is to be applied. Both parts should be read in conjunction with the Range of variables.</p> <p>Demonstrated ability to:</p> <ul style="list-style-type: none"> – liaise with relevant work areas to confirm or secure necessary materials, services, equipment and labour to meet production requirements – confirm that all equipment within the system meets hygiene and sanitation standards, all safety guards are in place and equipment is ready for operation – confirm that materials and/pr packaging consumables have been cleared for use – monitor implementation of set-up and start up procedures. This may involve monitoring the use of checksheets by others – monitor observance of work procedures and systems – monitor materials flow and work-in-progress through the system(<i>cont.</i>)

Element	Performance criteria	Evidence guide – Part A
Operate and monitor the system	<p>The system is started up according to company procedures</p> <p>Control points are monitored to confirm performance is maintained within specification</p> <p>System outputs meet specification</p> <p>Equipment is monitored to confirm operating condition</p> <p>System outputs meet specification</p> <p>Out-of-specification product, process and equipment performance is identified, rectified and/or reported</p>	<p><i>Demonstrated ability to: (continued)</i></p> <ul style="list-style-type: none"> – confirm that the system operates within specified parameters and control points are monitored – determine responses to out-of-specification results or non-conformance within level of responsibility – co-ordinate batch/product changeovers – communicate information effectively – plan maintenance and cleaning procedures to minimise disruption – monitor operating efficiencies of the system and investigate, resolve and/or report problems – review and maintain procedures to support system improvements <p>Underpinning knowledge:</p> <ul style="list-style-type: none"> – purpose and principles of the system – equipment purpose and operation including an understanding of process control systems where used
Shut down the system	<p>The system is shut down according to company procedures</p> <p>Equipment is cleaned and maintained to meet cleaning schedule and procedural requirements</p> <p>Waste generated by both the process and cleaning procedures is collected, treated and disposed or recycled according to company procedures</p>	<ul style="list-style-type: none"> – technical knowledge of product/packaging characteristics and processing/packaging requirements – codes and legislation relating to product and packaging requirements – equipment calibration schedule and responsibilities – type and purpose of sampling and testing conducted – related work areas and departments – relevant procedures, specifications and operating parameters – relevant systems and legislative responsibilities in areas such as human resources, food safety, quality, occupational health and safety and environmental management
Contribute to continuous improvement of the system	<p>Quality of process outputs is assessed against specifications</p> <p>Opportunities for improvement are identified and investigated</p> <p>Proposals for improvements are developed and implemented within company planning arrangements and according to company procedures</p>	<ul style="list-style-type: none"> – industrial awards and agreements relating to system operation – hazards, risks, controls and methods for monitoring processes within the system – maintenance and cleaning requirements of equipment in system – process improvement procedures and related consultative arrangements – troubleshooting procedures and problem solving techniques – recording and reporting requirements

Element	Performance criteria	Evidence guide – Part A
Record information	Workplace information is recorded in the appropriate format	

Evidence guide – Part B

Assessment guide

- Assessment must take account of the food industry's endorsed assessment guidelines and may use the non-endorsed *Assessment Framework for the Food and Beverage Processing Industry NFITC June 1995*.
- The competencies described in this unit need to be performed over time and events, under normal workplace conditions, having due regard for the key assessment principles of validity, reliability, fairness and flexibility.
- Assessment should be structured on whole of work activities giving emphasis to confirming that the assessee can achieve the workplace outcomes described in the Performance criteria, including demonstration of the underpinning knowledge and skills contained in the Evidence guide.
- The equipment used should be the actual items described in the Range of variables and Assessment context.
- The procedures and documentation should be those typically used in a workplace. Compliance with statutory occupational health and safety, food safety, hygiene and environmental requirements relevant to the food processing industry should be emphasised.
- Assessment should reinforce the integration of the key competencies and the food industry's core competencies for the particular AQF level.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.
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Assessment context

Assessment of this unit must occur in a real or simulated workplace. Such an environment must provide an opportunity for the assessee to prepare and operate a production system given:

- work procedures including advice on safe work practices, food safety and environmental requirements for processes within the system
- company policies and workplace systems including human resources, OHS, quality, food safety and environmental management
- production/packaging schedule
- specifications, control points and processing parameters
- production/packaging system equipment
- personnel operating the system
- services
- related work areas and communication system
- relevant OHS clothing and equipment
- cleaning, calibration and maintenance schedules as required
- sampling and testing schedules as required
- troubleshooting advice where available
- documentation and record keeping system
- planning, resources management and training arrangements

Relationship to other units

Pre-requisites or equivalent:

- Collect, present and apply workplace information
- Implement occupational health and safety principles and procedures
- Implement the quality system
- Implement the food safety plan

Co-requisites:

- Analyse and convey workplace information
- Monitor the implementation of occupational health and safety
- Monitor the implementation of the quality system
- Monitor the implement the food safety plan

Related units:

- Facilitate Teams

Where related units form an integral part of system operation in the workplace, these units should be co-assessed.

Relationship to learning resources

Main learning resource:

- General Foods System Preparation and Operation

Related learning resources:

- Industrial Communication C
- Quality Assurance C
- Occupational Health and Safety C
- Food Safety C (Hygiene and Sanitation D)
- Work Team Communication