



Australian Government

Department of Education, Employment and Workplace Relations

FDFHYCH2A Operate a creamed honey manufacture process

Release: 1

FDFHYCH2A Operate a creamed honey manufacture process

Modification History

Not applicable.

Unit Descriptor

This is a Specialist unit. It covers the skills and knowledge required to set up, monitor, and adjust a process to produce creamed honey.

This is a Specialist unit. It covers the skills and knowledge required to set up, monitor, and adjust a process to produce creamed honey.

Application of the Unit

Not applicable.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Not applicable.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

Elements and Performance Criteria

Element	Performance Criteria
1 Prepare the equipment and process for operation	1.1 Liquid and seed honey is confirmed and available to meet production requirements
	1.2 Cleaning and maintenance requirements and status

- are identified and confirmed
- 1.3 Machine components and related attachments are fitted and adjusted to meet operating requirements
 - 1.4 Processing/operating parameters are set to meet safety and production requirements
 - 1.5 Equipment performance is checked and adjusted as required
 - 1.6 Pre-start checks are carried out as required by workplace requirements
- 2 Operate and monitor the creamed honey manufacture process
- 2.1 The process is started and operated according to workplace procedures
 - 2.2 Equipment is monitored to identify variation in operating conditions
 - 2.3 Variation in equipment operation is identified and maintenance requirements are reported according to workplace reporting requirements
 - 2.4 The process is monitored to confirm that specifications are met
 - 2.5 Out-of-specification product/process outcomes are identified, rectified and/or reported to maintain the process within specification
 - 2.6 The workplace meets housekeeping standards
 - 2.7 Workplace records are maintained according to workplace recording requirements
- 3 Shut down the creamed honey manufacture process
- 3.1 The appropriate shutdown procedure is identified
 - 3.2 The process is shut down according to workplace procedures
 - 3.3 Maintenance requirements are identified and reported according to workplace reporting requirements

Required Skills and Knowledge

Not applicable.

Evidence Guide

The assessment process must address all of the following items of evidence.

Ability to:

1. Access workplace information to identify processing requirements
2. Select, fit and use personal protective clothing and/or equipment
3. Confirm supply of necessary materials and services. This includes selecting appropriate seed honey. It may also require selection of more than one liquid honey to meet required product characteristics
4. Conduct pre-start checks. This may involve inspecting equipment condition to identify any signs of wear; selecting appropriate settings and/or related parameters such as temperature and agitation settings; cancelling isolation or lockouts as required; confirming that equipment is clean and correctly configured for processing requirements; sensors and controls are correctly positioned; any scheduled maintenance has been carried out, and that all safety guards are in place and operational
5. Start, operate, monitor and adjust process equipment to achieve required outcomes. This may include monitoring control points and conducting inspections as required to confirm process remains within specification
6. Monitor supply and flow of materials to and from the process
7. Take corrective action in response to out-of-specification results
8. Respond to and/or report equipment failure within level of responsibility
9. Locate emergency stop functions on equipment
10. 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
11. Complete workplace records as required
12. Maintain work area to meet housekeeping standards

May include ability to:

13. Use process control systems
14. Demonstrate batch/product changeovers
15. Collect samples and conduct tests
16. Conduct routine maintenance
17. Clean and sanitize equipment

Knowledge of:

18. Basic principles of crystallisation. Aspects include an understanding of crystal structure and where appropriate, methods used to reduce crystal size, the effects of temperature and agitation on crystal formation, appropriate ratio of seed to liquid honey and factors that influence the crystallisation process including moisture content and crystal size
19. Basic operating principles of equipment. This may include an operational understanding of main equipment components, status and purpose of guards, equipment operating capacities and applications and the purpose and location of sensors and related feedback instrumentation. It also includes knowledge of services required and action to take if services are not available
20. Quality and organoleptic characteristics of different types of honey processed
21. Quality characteristics to be achieved by the final product and related test methods used to confirm quality
22. Quality requirements of seed and liquid honey used and the effect of variation on the final product
23. Operating requirements, parameters and corrective action required where the process is outside specified operating parameters. Typical operating parameters include ambient and processing temperatures, agitation speeds and holding times and temperatures
24. Typical equipment faults and related causes. This includes recognition of signs and symptoms of faulty equipment and early warning signs of potential problems
25. Methods used to monitor each stage of the production process. This may include inspecting, measuring and testing as required. It requires awareness of inspection or test points (control points) in the process and the related procedures and recording requirements
26. Contamination/food safety risks associated with the process and related control measures. This relates specifically to air inclusion and moisture content and related methods of control
27. Common causes of variation and corrective action required
28. Factors that affect the stability and shelf-life of the finished product and options to extend shelf-life. This includes storage conditions for packed product
29. OHS hazards and controls. This includes awareness of the limitations of protective clothing and equipment relevant to the work process
30. Requirements of different shutdowns as appropriate to the process and workplace production requirements. This includes emergency and routine shutdowns and procedures to follow in the event of a power outage
31. Isolation, lock out and tag out procedures and responsibilities
32. Procedures and responsibility for reporting production and performance information
33. Environmental issues and controls relevant to the process. This includes waste/rework collection and handling procedures related to the process

May include knowledge of:

34. Basic operating principles of process control where relevant. This includes the relationship between control panels and systems and the physical equipment
35. Product/process changeover procedures and responsibilities
36. Sampling and testing associated with process monitoring and control
37. Routine maintenance procedures
38. Cleaning and sanitation procedures

Relationship with other standards

Pre-requisite units

There are no pre-requisite units for this competency standard.

Co-assessment of related units

This unit should be assessed together with core units and other units of competence relevant to the function or work role. In addition, the following optional or ancillary units may be relevant:

FDFZPRCI2A Operate a process control interface

FDFOPTISP2A Implement sampling procedures

PMLTEST300B Perform basic tests

FDFOPTCRM2A Conduct routine maintenance

FDFZCSCIP2A Clean equipment in place

FDFZCSCS2A Clean and sanitize equipment

Resources required for assessment

Assessment must occur in a real or simulated workplace where the assessee has access to:

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 processing parameters

Process and related equipment and services

Seed and liquid honey

Sampling schedules and test procedures and equipment as required

Documentation and recording requirements and procedures

Cleaning procedures, materials and equipment as required

Assessment requirements

For information on how to assess this competency standard and who can assess, refer to the Assessment Guidelines for this Training Package.

The assessment process must address all of the following items of evidence.

Ability to:

1. Access workplace information to identify processing requirements
2. Select, fit and use personal protective clothing and/or equipment
3. Confirm supply of necessary materials and services. This includes selecting appropriate seed honey. It may also require selection of more than one liquid honey to meet required product characteristics
4. Conduct pre-start checks. This may involve inspecting equipment condition to identify any signs of wear; selecting appropriate settings and/or related parameters such as temperature and agitation settings; cancelling isolation or lockouts as required; confirming that equipment is clean and correctly configured for processing requirements; sensors and controls are correctly positioned; any scheduled maintenance has been carried out, and that all safety guards are in place and operational
5. Start, operate, monitor and adjust process equipment to achieve required outcomes. This may include monitoring control points and conducting inspections as required to confirm process remains within specification
6. Monitor supply and flow of materials to and from the process
7. Take corrective action in response to out-of-specification results
8. Respond to and/or report equipment failure within level of responsibility
9. Locate emergency stop functions on equipment
10. 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
11. Complete workplace records as required
12. Maintain work area to meet housekeeping standards

May include ability to:

13. Use process control systems
14. Demonstrate batch/product changeovers
15. Collect samples and conduct tests
16. Conduct routine maintenance
17. Clean and sanitize equipment

Knowledge of:

18. Basic principles of crystallisation. Aspects include an understanding of crystal structure and where appropriate, methods used to reduce crystal size, the effects of temperature and agitation on crystal formation, appropriate ratio of seed to liquid honey and factors that influence the crystallisation process including moisture content and crystal size
19. Basic operating principles of equipment. This may include an operational understanding of main equipment components, status and purpose of guards, equipment operating capacities and applications and the purpose and location of sensors and related feedback instrumentation. It also includes knowledge of services required and action to take if services are not available
20. Quality and organoleptic characteristics of different types of honey processed
21. Quality characteristics to be achieved by the final product and related test methods used to confirm quality
22. Quality requirements of seed and liquid honey used and the effect of variation on the final product
23. Operating requirements, parameters and corrective action required where the process is outside specified operating parameters. Typical operating parameters include ambient and processing temperatures, agitation speeds and holding times and temperatures
24. Typical equipment faults and related causes. This includes recognition of signs and symptoms of faulty equipment and early warning signs of potential problems
25. Methods used to monitor each stage of the production process. This may include inspecting, measuring and testing as required. It requires awareness of inspection or test points (control points) in the process and the related procedures and recording requirements
26. Contamination/food safety risks associated with the process and related control measures. This relates specifically to air inclusion and moisture content and related methods of control
27. Common causes of variation and corrective action required
28. Factors that affect the stability and shelf-life of the finished product and options to extend shelf-life. This includes storage conditions for packed product
29. OHS hazards and controls. This includes awareness of the limitations of protective clothing and equipment relevant to the work process
30. Requirements of different shutdowns as appropriate to the process and workplace production requirements. This includes emergency and routine shutdowns and procedures to follow in the event of a power outage
31. Isolation, lock out and tag out procedures and responsibilities
32. Procedures and responsibility for reporting production and performance information
33. Environmental issues and controls relevant to the process. This includes waste/rework collection and handling procedures related to the process

May include knowledge of:

34. Basic operating principles of process control where relevant. This includes the relationship between control panels and systems and the physical equipment
35. Product/process changeover procedures and responsibilities
36. Sampling and testing associated with process monitoring and control
37. Routine maintenance procedures
38. Cleaning and sanitation procedures

Relationship with other standards

Pre-requisite units

There are no pre-requisite units for this competency standard.

Co-assessment of related units

This unit should be assessed together with core units and other units of competence relevant to the function or work role. In addition, the following optional or ancillary units may be relevant:

FDFZPRCI2A Operate a process control interface

FDFOPTISP2A Implement sampling procedures

PMLTEST300B Perform basic tests

FDFOPTCRM2A Conduct routine maintenance

FDFZCSCIP2A Clean equipment in place

FDFZCSCS2A Clean and sanitize equipment

Resources required for assessment

Assessment must occur in a real or simulated workplace where the assessee has access to:

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 processing parameters

Process and related equipment and services

Seed and liquid honey

Sampling schedules and test procedures and equipment as required

Documentation and recording requirements and procedures

Cleaning procedures, materials and equipment as required

Assessment requirements

For information on how to assess this competency standard and who can assess, refer to the Assessment Guidelines for this Training Package.

Range Statement

Range statement

The range statement indicates the context for demonstrating competence. This statement is a guide and, unless otherwise indicated, items may or may not apply as required by the work context.

Work is carried out according to company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements

Legislative requirements are typically reflected in procedures and specifications. Legislation relevant to this industry includes the Food Standards Code, labelling including weights and measures legislation; and legislation covering food safety, environmental management, occupational health and safety, anti-discrimination and equal opportunity

Workplace information may include Standard Operating Procedures (SOPs), specifications, production schedules and instructions, manufacturers' advice, standard forms and reports

Production processes may be partly or fully automated. While processes vary, typical stages include addition of seed honey, holding, mixing/working and temperature control

Operation of equipment and processes may require the use of process control panels and systems

Equipment may include jacketed tanks/vats, buffer tanks, mixers/homogenisers, scraped surface heat exchangers, agitators and pumps

Operators carry out changeovers within workplace arrangements and the relevant changeover procedures should be used to customise the details of this unit. Where more detailed changeovers are carried out, also refer to FDFOPTCRM2A **Conduct routine maintenance**. Services may need to be confirmed. These depend on the nature of the process. Typical examples include power, water, and compressed and instrumentation air.

Range statement

The range statement indicates the context for demonstrating competence. This statement is a guide and, unless otherwise indicated, items may or may not apply as required by the work context.

Work is carried out according to company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements.

Legislative requirements are typically reflected in procedures and specifications. Legislation relevant to this industry includes the Food Standards Code, labelling including weights and measures legislation; and legislation covering food safety, environmental management, occupational health and safety, anti-discrimination and equal opportunity.

Workplace information may include Standard Operating Procedures (SOPs), specifications, production schedules and instructions, manufacturers' advice, standard forms and reports.

Production processes may be partly or fully automated. While processes vary, typical stages include addition of seed honey, holding, mixing/working and temperature control.

Operation of equipment and processes may require the use of process control panels and systems.

Equipment may include jacketed tanks/vats, buffer tanks, mixers/homogenisers, scraped surface heat exchangers, agitators and pumps.

Operators carry out changeovers within workplace arrangements and the relevant changeover procedures should be used to customise the details of this unit. Where more detailed changeovers are carried out, also refer to FDFOPTCRM2A **Conduct routine maintenance**. Services may need to be confirmed. These depend on the nature of the process. Typical examples include power, water, and compressed and instrumentation air.

Unit Sector(s)

Not applicable.