



Australian Government

Department of Education, Employment and Workplace Relations

FDFV2001A Apply hydro-cooling processes to fresh produce

Revision Number: 1

FDFFV2001A Apply hydro-cooling processes to fresh produce

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to use hydro-cooling equipment and processes to cool fresh fruit or vegetables in preparation for storage or transportation.
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Application of the Unit

Application of the unit	This unit has application in a food processing environment or at a farm or production site where produce is processed directly after harvest to maximise longevity. Where work is undertaken in a cool storage environment, also consider FDFOP2007A Work in a freezer storage area.
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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
1. Determine requirements for hydro-cooling	1.1. Key steps in the process of hydro-cooling are identified 1.2. Impact of timing and temperature on the hydro-cooling process are identified 1.3. Produce for hydro-cooling is identified and specific cooling and transfer requirements confirmed 1.4. Consequences of incorrect hydro-cooling are identified 1.5. Equipment performance is checked and adjusted as required 1.6. Pre-start checks are carried out as required by workplace requirements 1.7. Goods are located in correct storage areas to meet storage temperature, stores handling and stock rotation requirements 1.8. Stores information is recorded according to workplace requirements
2. Conduct hydro-cooling	2.1. Storage facility is checked for readiness and allocation of space for produce confirmed 2.2. Handling equipment is used to transfer produce in a manner that is safe and maintains produce quality 2.3. Operating parameters for hydro-cooling equipment are set as required to meet safety and cooling requirements 2.4. Hydro-cooling is applied to produce 2.5. Produce is transferred to storage 2.6. Process information is recorded according to workplace requirements 2.7. The work area is maintained according to housekeeping standards 2.8. Work is conducted in accordance with workplace environmental guidelines
3. Monitor hydro-cooling process	3.1. Process is monitored to ensure quality standards are achieved 3.2. Temperature is checked to ensure required levels are maintained 3.3. Non-compliances or problems are promptly identified and acted upon

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 determine cooling and storage requirements
- identify processing requirements, including temperature limits and timing requirements
- identify key stages of cooling process
- select, fit and use personal protective clothing and/or equipment
- use materials handling equipment as required to undertake work functions
- follow procedures to measure temperature of produce, such as using instrumentation as required to take core and surface temperatures
- read instrumentation, such as temperature gauges, to monitor temperatures
- identify and report out-of-specification temperatures in produce and storage facilities
- take corrective action in response to out-of-specification temperatures, including implementation of procedures to segregate damaged or potentially unsafe produce
- complete records of stock receipt and transfer as required
- maintain work area to meet housekeeping standards
- 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 knowledge

Knowledge of:

- occupational health and safety (OHS) hazards and controls, including the purpose and limitations of protective clothing and equipment
- hydro-cooling facilities and capacities available in the work area
- temperature control requirements of produce handled in the work area, including acceptable temperature ranges, consequences of failing to meet these ranges, and requirements for gradual temperature change
- handling procedures for receiving and locating produce including procedures for identifying, segregating and disposing of damaged or potentially unsafe stock
- stock handling procedures for transferring cooled stock from a temperature controlled environment, including the maximum duration stock can be held outside a controlled environment
- food safety and quality consequences of stock temperature control requirements not being met

REQUIRED SKILLS AND KNOWLEDGE

- monitoring procedures and instrumentation, including the use of thermometers or other temperature measuring instrumentation
- notification, recording and reporting requirements
- operating procedures for goods handling equipment as required
- housekeeping requirements for work area
- recording requirements and procedures

Evidence Guide

EVIDENCE GUIDE

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.

Overview of assessment

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.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- identify handling, hydro-cooling and storage requirements of produce
- monitor temperature to ensure standards are maintained
- handle and transfer produce to maintain required conditions
- identify and act on non-conformances
- complete workplace documentation
- apply food safety procedures.

Context of and specific resources 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
- hydro-cooling specifications and facilities
- produce requiring cooling
- load shifting equipment as required
- stock information recording system and procedures.

Method of assessment

This unit should be assessed together with core units and other units of competency relevant to the function or work role. Examples could be:

- TLIA1707C Apply product knowledge to complete work operations
- TLID107C Shift materials safely using manual handling methods
- TLID1007C Operate a forklift
- TLIK107C Use infotechnology devices and computer applications in the workplace.

EVIDENCE GUIDE**Guidance information for
assessment**

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.

Range Statement

RANGE STATEMENT

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.

Policies and procedures	Work is carried out according to company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements
Legislative requirements	Legislative requirements are typically reflected in procedures and specifications. Legislation relevant to this industry includes: - the Food Standards Code, including labelling, weights and measures legislation - legislation covering food safety, environmental management, OHS, anti-discrimination and equal opportunity
Workplace information	Workplace information may include: - standard operating procedures (SOPs) - specifications - production schedules and instructions - manufacturers' advice - standard forms and reports

Unit Sector(s)

Unit sector	Fruit and vegetables
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		