



Australian Government

Department of Education, Employment and Workplace Relations

FDFCEL2001A Perform oak handling activities

Release: 2

FDFCEL2001A Perform oak handling activities

Modification History

This unit supersedes and is equivalent to FDFCELOAKB Perform oak handling activities.
April 2012: Minor typographical corrections.

Unit Descriptor

Unit descriptor	This specialist unit has been developed for the cellar stream of the wine sector. It covers the skills and knowledge required to use, treat and store oak barrels and casks, stack barrels and perform minor repairs. Depending on the type of activities, training in confined space entry may be required to complete this unit of competency.
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Application of the Unit

Application of the unit	This unit applies to cellar operations staff required to handle oak barrels in the production and storage of wine or spirits. The unit covers managing the equipment and process, monitoring and keeping of records.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
	FDFCEL2018A	Carry out inert gas handling operations
	FDFCEL2019A	Carry out transfer operations

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.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Use oak knowledge to complete production requirements	1.1 Oak is located and identified using workplace system 1.2 Appropriate filling, emptying and topping procedures are selected 1.3 Transfer operations are used to complete production requirements
2. Treat, store and repair oak	2.1 Treatment, storage and/or repair requirements are identified 2.2 Equipment and materials are checked to ensure availability and readiness for use 2.3 Equipment is set up to meet requirements, as required 2.4 Treated oak meets specification 2.5 Stored oak meets specification 2.6 Repaired oak meets specification 2.7 Equipment is monitored to confirm operating condition as required 2.8 Out-of-specification product, process and equipment performance is identified, rectified and/or reported 2.9 Waste generated by the process is collected, treated and disposed of or recycled according to workplace procedures
3. Stack oak barrels and casks	3.1 Stacking requirements are identified and planned 3.2 Appropriate stacking method is selected 3.3 Equipment and materials are checked to ensure availability and readiness for use 3.4 Equipment is set up to meet requirements, as required 3.5 Stacked oak barrels and casks meet specification 3.6 Out-of-specification stacking is identified, rectified and/or reported 3.7 Waste generated by the process is collected, treated and disposed of or recycled according to workplace procedures 3.8 Work is conducted in accordance with workplace environmental guidelines
4. Record information	4.1 Workplace information is recorded in the appropriate format

Required Skills and Knowledge

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

Required skills include:

Note: The following required skills should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Ability to:

- access workplace information to identify oak handling requirements
- select, fit and use personal protective clothing and/or equipment
- confirm supply of necessary materials and services
- liaise with other work areas
- prepare materials as required
- select, set up and operate equipment as required, according to instructions
- select appropriate oak handling activities and methods. This may depend on product characteristics and may include:
 - gassing barrels prior to filling
 - sparging line during emptying
 - performing oak handling activities according to instructions
 - using hand tools
- monitor oak handling activities and equipment to identify out-of-specification results or non-compliance. This may involve monitoring:
 - positioning of stack
 - securing of stack
 - condition of oak vessels
 - sequence of filling, emptying and topping of barrels
- 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 shutdown requirements
- record workplace information
- maintain work area to meet housekeeping standards
- identify, rectify and/or report environmental non-compliance
- apply Occupational Health and Safety (OHS) principles, policies and procedures associated with confined space entry, as required
- perform routine maintenance
- use oral communication skills/language 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 includes:

Note: The following required knowledge should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Knowledge of:

- purpose and principles of oak use in winemaking and/or spirit production
- use of oak alternatives
- link to related processes
- effect of oak storage on end product including:
 - flavour
 - body
 - complexity
 - alcohol content
- types of oak used for storage
- common faults in oak barrels and casks, which may include:
 - leaks
 - possible sources of oak contamination and effect on end product
- minor repair methods and procedures
- faults on end product
- main methods used in oak barrel and cask stacking
- services used
- significance and method 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
- shutdown and cleaning requirements associated with changeovers and types of shutdowns
- waste handling requirements and procedures
- recording requirements and procedures
- OHS hazards and controls associated with confined space entry as required
- manual cleaning and sanitising requirements and procedures

Evidence Guide**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: • use personal protective clothing and equipment as required • identify use of oak product in wine making process • carry out oak treatment according to instructions • follow OHS procedures and MSDS or other instructions for use of chemicals in oak treatment • carry out minor repairs • stack and secure oak vessels according to instructions • maintain records according to requirements.
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 as required • work procedures, including advice on company practices, safe work practices, food safety, quality and environmental requirements • instructions, information, specifications and schedules as required • equipment, services and corresponding information as required • products and materials as required • internal and external customers and suppliers as required • cleaning procedures, materials and equipment as required • documentation and recording requirements 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.

EVIDENCE GUIDE

Guidance information for assessment

To ensure consistency in one's performance, competence 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 in accordance with workplace procedures, licensing requirements and legislative requirements

Workplace information

Workplace information can include:

- Standard Operating Procedures (SOPs)
- specifications
- production schedules or instructions
- routine maintenance schedules
- work notes
- Material Safety Data Sheets (MSDS)
- manufacturer instructions
- verbal direction from manager, supervisor or senior operator

Equipment

Equipment may include:

- specific transfer equipment
- hand tools (e.g. hoop driver, hammer and level)
- barrel shaver
- sulphur burners
- sulphitometers
- purpose-designed barrel handling equipment

Oak

Oak may include:

RANGE STATEMENT	
	• various barrel sizes (e.g. hogshead, puncheon, vat, barrique and quarter cask) • vats • casks and planks made of various oak types (e.g. French, German, American and Yugoslavian) • new and old oak
Stacking methods	Stacking methods may include: • pyramid style • cradle • chock • stillage
Materials	Materials may include: • stillaging • chocks • cradles • sulphur dioxide • sulphuric acid • sodium hydroxide • sodium carbonate • sodium chloride • spirit and materials for repairing oak (e.g. hoops, nails, wood and cotton)
Service	Services may include: • power • water • steam • compressed air • inert gas
Information systems	Information systems may be: • print or screen based
Work hazards	Work may involve exposure to: • chemical, dangerous or hazardous substances
Product to be stored in cask	Product to be stored in cask may include: • red, white or fortified wines • spirits of various ages and stages of maturity

Unit Sector(s)

Unit sector	Wine operations
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Custom Content Section

Not applicable.