



Australian Government

Department of Education, Employment and Workplace Relations

FDFCEL2020A Prepare and wax tanks

Release: 2

FDFCEL2020A Prepare and wax tanks

Modification History

This unit supersedes and is equivalent to FDFCELWAXB Prepare and wax tanks.
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 prepare and wax tanks.
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Application of the Unit

Application of the unit	This unit applies to the waxing of tanks used in winemaking. The unit covers selecting and using equipment appropriate to the tank to be waxed and selection of the appropriate wax. This unit covers entering and removing top layer of wax on tank surfaces and removal of tartrates and waste from tanks. Training in confined space entry will be required for this unit. A Hot Work permit may be required. Special tank entry and breathing equipment may also be required. Application of wax may include spraying and melting of wax onto tank surface.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

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. Prepare materials and tank for waxing	1.1 Tank is prepared and confirmed as ready to wax 1.2 Equipment is checked to confirm readiness for use 1.3 Services are confirmed and available, as required 1.4 Wax is prepared according to instructions
2. Wax tanks	2.1 Top layer of wax is removed according to workplace procedures 2.2 Wax is applied according to workplace procedures 2.3 Equipment is operated according to workplace procedures 2.4 Waxing process is monitored and out-of-specification process and equipment performance is identified, rectified and/or reported 2.5 Occupational health and safety (OHS) procedures are adhered to at all times 2.6 Waxed tank meets specification
3. Complete tank waxing activities	3.1 Waxing equipment is shut down according to workplace procedures 3.2 Equipment is cleaned according to workplace procedures 3.3 Waste generated by both the waxing process and cleaning process is collected, treated and disposed of, or recycled according to workplace procedures 3.4 Tank is returned to operating order 3.5 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 waxing requirements
- select, fit and use personal protective clothing and/or equipment
- confirm supply of necessary equipment, materials, services and personnel
- liaise with other work areas
- apply confined space entry policy and procedures
- prepare tank for waxing. This may include:
 - dismantling
 - positioning valves and components
 - removing tartrates
 - drying tank surface
 - removing waste from tank
 - cleaning tank
 - pre-entry checks on tank and atmosphere
- prepare wax for use. This may include:
 - selecting appropriate wax
 - melting wax
 - blending wax to meet specification
 - following appropriate handling procedures
- confirm equipment status and condition
- remove top layer of wax on tank surfaces. This may include:
 - manual scraping
 - using a gas torch
 - utilising cold scrape methods
- apply wax to tank surfaces. This may include:
 - spraying hot melt wax onto surface
 - melting wax into tank surface using a blowtorch
- operate equipment according to workplace procedures and manufacturer instructions
- monitor waxing process. This may include monitoring:
 - wax temperature
 - surface coverage (area and depth)
 - burn on effectiveness
 - integrity of seal of tank surface

- atmosphere in tank
- equipment operation
- apply OHS principles, policies and procedures, including those associated with:
 - confined space entry
 - working on ladders or scaffolding
 - working with hazardous substances
- return tank to operating order. This may include:
 - positioning valves or door
 - carrying out checks and inspections to confirm effectiveness of waxing
- 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
- clean waxing equipment
- identify, rectify and/or report environmental non-compliance
- apply OHS principles, policies and procedures associated with a Hot Work permit according to enterprise procedures
- 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 waxing tanks
- safe handling and storage of waxes used
- functions of waxes and related equipment and materials
- waxing requirements for specific tanks. This includes tanks with damage, and different wax mix preparation requirements
- purpose of personal protective clothing and equipment
- methods used to render tanks safe to wax, including lock-out, tag-out and isolation procedures
- equipment settings required for operating waxing equipment
- inspection points for waxing
- regulatory requirements as they affect immediate responsibilities for waxing
- types of waste generated by both the waxing and the cleaning process and related collection, treatment and disposal requirements

- requirements to liaise or advise related work areas
- reporting and recording systems
- tank waxing procedures and specifications
- OHS hazards and controls, including:
 - confined space entry
 - using hazardous substances
 - working on ladders and scaffolding
- procedures for returning tanks to operation
- OHS hazards and controls associated with a Hot Work permit where relevant

Evidence Guide

Not applicable.

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
Preparation and waxing materials	Preparation and waxing materials may include: • cleaning and sanitising chemicals, paraffin, micro wax and beeswax
Equipment	Equipment used to prepare and wax tanks depends on specific requirements and would normally include: • hoses • spraying unit • burning on equipment • scaffolding • ventilation unit • scrapers • air blowers • air driers
Tank entry equipment	Tank entry equipment may include: • harness • rope • breathing apparatus • medical air supply

RANGE STATEMENT	
	• buddy bottle • ladder • fire extinguisher • oxygen monitor
Services	Services depend on specific requirements. Examples include: • high-pressure water or steam, and gas
Preparing equipment for cleaning	Preparing equipment for cleaning includes: • confirming that all waste materials have been cleared and equipment is correctly locked out, tagged out or isolated as required by operating procedures
Work	Work may be: • carried out in confined spaces
Work hazards	Work may involve exposure to: • chemical, dangerous or hazardous substances
Workplace information	Workplace information may be: • print or screen based

Unit Sector(s)

Unit sector	Wine operations
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Custom Content Section

Not applicable.