



Australian Government

AHCPHT510 Manage a wine making process

Release: 1

AHC PHT510 Manage a wine making process

Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0.

Application

This unit of competency describes the skills and knowledge required to determine wine to be produced and winemaking process, acquire grapes for processing, initiate a ferment, manage primary and secondary fermentation and mature wine in storage vessels.

The unit applies to individuals who apply specialised skills and knowledge to the management of a wine making process, and take personal responsibility and exercise autonomy in undertaking complex work. They analyse and synthesise information and analyse, design and communicate solutions to sometimes complex problems.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Production horticulture (PHT)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine wine and wine making process	1.1 Determine the type and style of wine to be produced according to variety and characteristics of the grapes, winemaking factors, consumer preferences, client requirements and industry trends 1.2 Determine the winemaking process to be followed according to type and style of wine to be produced, quality and quantity of grapes available, and availability of required equipment and personnel

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
2. Acquire, deliver and prepare grapes for fermentation	2.1 Harvest and handle grapes according to standard vineyard practices and quality criteria 2.2 Acquire and deliver the grapes that meet the desired variety and quality parameters to the winery 2.3 Prepare grapes for fermentation, and deliver must or juice to fermentation vessels to meet the desired wine type and style requirements
3. Initiate a ferment	3.1 Select yeast types or strains to produce a given wine type and style 3.2 Prepare fermentation vessels and transfer must or juice according to wine type and style requirements 3.3 Prepare yeast culture according to specifications and add to fermentation vessels
4. Manage primary fermentation	4.1 Monitor and adjust physical and chemical characteristics of ferment 4.2 Predict potential fermentation problems 4.3 Detect the presence of undesirable fermentation characteristics 4.4 Outline steps to rectify fermentation problems 4.5 Rack off gross lees or pressings into appropriate vessels at a determined time 4.6 Maintain records of additions and adjustments
5. Manage secondary fermentation	5.1 Obtain and check oak barrels for serviceability for use if required 5.2 Inoculate wine with selected malolactic fermentation bacteria 5.3 Manage malolactic fermentation to the predetermined end point
6. Mature wine in storage vessels	6.1 Select suitable maturation storage vessels to produce a given wine style and check for serviceability and use 6.2 Transfer wine into the selected vessels according to determined wine style characteristics 6.3 Monitor condition of wine in storage 6.4 Bottle and seal wine according to workplace procedures 6.5 Maintain wine production and storage records

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Identify and interpret information regarding type and style of wine, grape variety and characteristics - Identify and interpret information regarding winemaking factors, consumer preferences, client requirements and industry trends
Oral communication	Initiate discussions with clients, using clear language to determine wine production requirements
Numeracy	- Access and analyse data from specifications to calculate yeast culture quantities - Calculate bacteria quantities for inoculation of wine
Navigate the world of work	Identify and describe own workplace requirements associated with own role and area of responsibility

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCPHT510 Manage a wine making process	AHCPHT506 Manage a wine making process	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCPTH510 Manage a wine making process

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit. There must be evidence that the individual has managed a wine making process on at least one occasion and has:

- planned processes that may be used to maximise production of grapes that meet winery quality requirements
- acquired and processed grapes for wine production
- performed must handling processes
- operated the range of equipment required to process grapes from winery receipt point to the fermentation tank
- initiated and managed the fermentation process
- made additions and finings as required
- identified, established, supervised and monitored daily cellar work practices
- performed chemical analyses necessary for the winemaking process
- organised and undertaken routine cellar operations
- operated the filtration and bottling processes.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- changes to the chemical characteristics of grapes during ripening, including acid, sugar and flavour
- changes to the physical characteristics of grapes during ripening, including size, hardness and colour
- climatic and physical features of wine grape growing areas and wine styles produced
- types and styles of wine produced in Australia
- varieties of wine grapes in Australia
- principles and practices for managing a wine making process
- balance in relation to wine taste

- vineyard practices relevant to the production of grapes that meet the requirements of the winery
- processes involved in handling grapes from the vineyard to the winery in order to produce wine
- must and marc handling procedures
- routine winemaking and cellar operation procedures including maintenance of a clean, safe working environment
- ranges of equipment and using this equipment to process grapes and must in a winery
- factors involved in the initiation and management of primary, secondary and malolactic fermentation processes
- ideal Australian cellaring conditions
- equipment and processes for wine filtration.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace setting or an environment that accurately represent workplace conditions
- resources, equipment and materials:
 - industry publications and internet sources of information on variety and characteristics of grapes, winemaking factors, consumer preferences, client requirements and industry trends
 - grapes, yeast and bacteria for production of wine
 - fermentation vessels
 - oak barrels
 - storage vessels
 - wine bottles and seals
- specifications:
 - yeast culture specifications
 - malolactic fermentation bacteria inoculation specifications
- relationships:
 - clients
- timeframes:
 - according to the job requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>