Title	Perform basic fermentation operations in a commercial wine cellar operation			
Level	3	Credits	5	

Purpose	This unit standard is for people working as entry level cellar hands in the winemaking industry.	
	People credited with this unit standard are able to: explain, prepare for, carry out, and complete basic fermentation operations in a commercial wine cellar operation.	

Classification	Food and Related Products Processing > Wine Production - Cellar Operations
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Available grade Achieved

Explanatory notes

1 References

Enactments and codes relevant to this unit standard include but are not limited to the: Food Act 1981 and Food Act 2014; Health and Safety in Employment Act 1992, which will be replaced by the Health and Safety at Work Act 2015 when it becomes effective on 4 April 2016; Resource Management Act 1991; Food (Safety) Regulations 2002; Food Hygiene Regulations 1974; Australia New Zealand Food Standards Code, available at <u>http://www.foodstandards.govt.nz/</u>.

2 Definition

Must - unfermented grape juice, including pips (seeds), skins and stalks.

Fittings – T-piece fittings, joiners, reducers. *CO2* – carbon dioxide.

Outcomes and evidence requirements

Outcome 1

Explain alcoholic fermentation processes used in commercial wine cellar operations.

Evidence requirements

- 1.1 Reasons for alcoholic fermentation in winemaking are explained in accordance with oenology principles.
- 1.2 Fermentation equipment used at the candidate's workplace is identified and described in accordance with workplace procedures.

- Range equipment may include but are not limited to storage vessels, rotary fermenters, open top fermenters, potter fermenters, swept-arm fermenters, barrels, static drainer.
- 1.3 Techniques and procedures, used at the candidate's workplace, to manipulate the fermentation process are explained.
 - Range techniques may include but are not limited to pressure, temperature, yeast propagation, CO₂, skin contact, fermentation vessels, additions.
- 1.4 The quality control parameters used in alcoholic fermentation are explained in accordance with workplace procedures.
 - Range parameters may include but are not limited to product specification, fermentation temperature, use of digital probe thermometer, use of hydrometer.

Outcome 2

Prepare for fermentation tasks in commercial wine cellar operations.

Range evidence is required of white wine fermentation tasks.

Evidence requirements

- 2.1 Potential hygiene and safety hazards are identified, and the steps required to control them are explained and used, in accordance with workplace procedures.
- 2.2 Instructions in cellar notes relating to the fermentation tasks, and fermentation method are interpreted.
- 2.3 Cleaning and sanitising of the equipment are confirmed in accordance with workplace procedures.
- 2.4 Equipment is selected and connected, and set up is verified by supervisor, in accordance with workplace procedures.
 - Range may include but is not limited to pumps, valves, instrumentation, fittings.

Outcome 3

Carry out fermentation tasks in commercial wine cellar operations.

Range evidence is required for red wine fermentation tasks.

Evidence requirements

3.1 Must and materials are prepared for fermentation in accordance with workplace procedures.

- Range must temperature, additions, yeast.
- 3.2 Additions are made in accordance with workplace procedures.
- 3.3 Fermentation process is monitored in accordance with workplace procedures.
 - Range monitoring may include tank temperature, baume, brix hydrometer reading., checking pump-overs, checking cap condition and temperature.
- 3.4 Deviations in fermentation process are identified, reported, and corrective actions are taken, in accordance with workplace procedures.
 - Range may include but is not limited to vessel pressure, temperature, fermentation activity, baume. Evidence of corrective action for 3 deviations is required.
- 3.5 Documentation is completed and results of fermentation monitoring are communicated in accordance with workplace procedures.

Outcome 4

Complete fermentation tasks in commercial wine cellar operations

Range evidence is required for completion of white wine fermentation tasks.

Evidence requirements

- 4.1 Equipment used for fermentation is cleaned and stored in accordance with workplace procedures.
- 4.2 Waste and sub-standard materials are handled, disposed of, or recycled in accordance with workplace procedures.

Planned review date	31 December 2019

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	19 November 2015	N/A

Consent and Moderation Requirements (CMR) reference	0013		
This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.			

Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the CMRs. The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact Competenz at <u>qualifications@competenz.org.nz</u> if you wish to suggest changes to the content of this unit standard.