Title	Carry out crushing operations in a commercial wine cellar operation		
Level	4	Credits	8

Purpose	This unit standard is for people who carry out and control wine production processes in the winemaking industry.	
	People credited with this unit standard are able to: explain, prepare for, operate, and complete the crushing process in a commercial wine cellar operation.	

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

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 http://www.foodstandards.govt.nz/.

2 Definitions

Additions refer to chemicals or materials required to maintain the quality of the juice and may include –sulphur dioxide, tartaric acid, pectin splitting enzymes, tannin. Cellar notes refer to instructions written by the winemaker that relate to the processing of juice and wine.

Services refer to electricity, water, compressed air, inert gas, steam.

Workplace procedures – approved procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site safety procedures, equipment operating procedures, codes of practice, quality assurance procedures, housekeeping standards, and procedures to comply with legislative and local body requirements.

MOG – matter other than grapes.

3 Range

Crushing equipment may include but is not limited to – receival hopper, oscilly, high-flow rate sorter, destemmer, beater - destemmer, selectiv' sorter, optical sorter.

Outcomes and evidence requirements

Outcome 1

Explain the crushing process in a commercial wine cellar operation.

Evidence requirements

- 1.1 The purpose and principles of crushing are explained in accordance with oenology principles.
- 1.2 The operation of different types of crushing equipment is explained in accordance with oenology principles.
- 1.3 Crushing equipment used at the candidate's workplace is explained in terms of operating principles, components, operating parameters, capability, and process controls.

Range parameters – MOG levels, weight of grapes, grape intake requirements; capability – tonnes per hour processed by varietal.

1.4 Roles and responsibilities of the crushing equipment operator are explained in accordance with workplace procedures.

Outcome 2

Prepare for crushing in commercial wine cellar operations.

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 crushing process, additions, and must destination are interpreted in accordance with workplace procedures.
- 2.3 Cleaning and sanitising of the equipment are confirmed in accordance with workplace procedures.
- 2.4 Additions and services are prepared in accordance with workplace procedures.
- 2.5 Grapes are received in accordance with workplace procedures.

Outcome 3

Control the crushing process in commercial wine cellar operations.

Evidence requirements

- 3.1 The crushing process is set up and operated to meet environmental requirements in accordance with workplace procedures.
- 3.2 Crusher changeovers are completed in accordance with workplace procedures.

- 3.3 Sampling and quality control checks are carried out in accordance with workplace procedures.
- 3.4 Deviations in must quality and equipment operating conditions are identified, and corrective actions are taken, in accordance with workplace procedures.

Range must quality – dilution, oxidation, temperature, product loss;

equipment operating conditions may include but are not limited to – hopper screw speed, roller settings, destemmer speed, must

pump speed;

evidence of corrective action for three deviations is required.

3.5 Monitoring of crushing process input, and downstream processing parameters, and quality control points ensure that must quality requirements are met.

Outcome 4

Complete the crushing process in commercial wine cellar operations.

Evidence requirements

4.1 Crushing process is verified as complete and equipment is shut down in accordance with workplace procedures.

Range may include but is not limited to –push through, shutdown,

isolation, disconnection.

- 4.2 Waste and sub-standard materials are handled and disposed of or recycled in accordance with workplace procedures.
- 4.3 Equipment is prepared for cleaning in accordance with workplace procedures.
- 4.4 The results of the crushing process are documented and communicated in accordance with workplace procedures.

Planned review date	31 December 2019
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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
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This CMR can be accessed at http://www.nzga.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 qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.