




Planning a Successful Bottling Day

Pat Henderson, Kenwood Vineyards

A landscape photograph of a vineyard with rolling hills and a cloudy sky. The foreground shows rows of green grapevines. The middle ground features a dense line of trees and shrubs. The background consists of rolling hills under a heavy, overcast sky with some light breaking through near the horizon.

Do's and don'ts: Managing quality control for bottling day

*Pat Henderson
Chief Winemaker
Kenwood Vineyards*

Winemaker's Perspective

- Wine Quality must be preserved throughout bottling.
 - You can't change it once it is in the bottle
- Insure compliance
- Quality Assurance vs Quality Control (QA/QC)

Some Assumptions:

- Package is ready - materials in stock
 - Cork testing
- Line is ready - machines set up for package before wine is sent to line
- Wine is finished
 - Heat & cold stabile
 - Clarified and adjusted
 - Wine is complainant with label and label has approved COLA
 - Wine tastes right
 - No surprises

Bottling Sign Off

- Final Analysis
- Composition check
- Appellation
- 2 person sign off
- Line does not start line w/o sign off
- This is a re-check of what you should already know

Sterile Bottling

- Not absolutely necessary for stable dry wine but benefits outweigh the costs
- Sanitation- steam vs. hot water
 - Measure from coldest part of the filler
 - Log time and temp
 - Cool down when done
 - Bioluminescence test
- Membrane filters
 - Integrity testing - Pressure hold/bubble point
 - If not sterile bottling use a tight screen as a “bug catcher”

Steam Generator



- Faster
- Uses much less water

Start Up

- Check with line manager all is ready to go before bring wine to filler
- Dump first bottle filled from each filler valve

Start up Alcohol Check

- Alcohol
 - Compliance
 - Integrity
 - Must match sign off

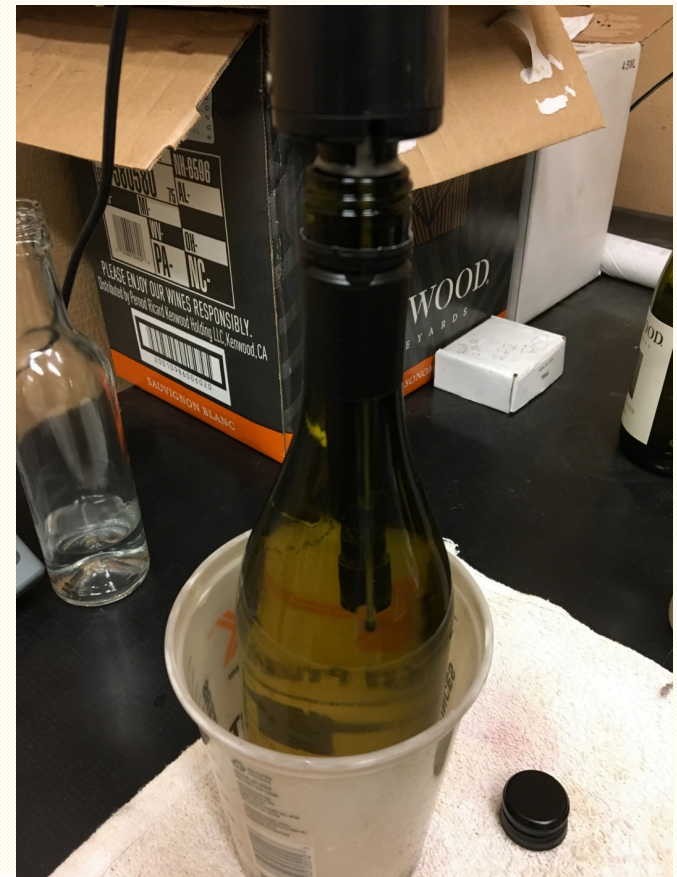


Start up and Periodic QC Tests

- These tests are done and start up and throughout the day
 - Fill level by weight & density

Start up and Periodic QC Tests

- Dissolved Oxygen (DO)



Start up and Periodic QC Tests

- Torque test – screw cap



Start up and Periodic QC Tests

- Bottle vacuum – cork



Automatic QC:

- Done by machine on every bottle
- Essential for fast lines with case packing machines.
- SOP with standards and actions to take if any readings are out of spec

Automatic QC:

- Time/date stamp – laser etched in glass



Automatic QC:

- Vision System – label compliance and appearance and capsule/screw cap check



Automatic QC:

- Weight check finds missing bottles and low fills
- Case label and barcode scan

Archiving:

- All information on wine is archived and saved as PDF files
 - Final analysis and bottling sign off
 - COLA
 - Work order back track report –bottling to weigh tags
 - Full composition and appellation report
 - Additive/treatment report
- We could always generate these reports at a later date but it is nice to have everything stored in one place and backed up

Before Release:

- Before wine is shipped to distributors
- Taste test by winemakers
 - Approved for release



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