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## A CONVERSATION WITH

# Joe Dobbles

Oregon winemaker discusses closures and how to eliminate problems on bottling day

By Laurie Daniel

**W**inemaker Joe Dobbles grew up on a farm in Oregon's Willamette Valley, where he raised marionberries, a type of blackberry. His father, a doctor, was also a home winemaker, and young Joe liked to spend his time in the kitchen, developing his interest in diverse flavors.

By the time Dobbles graduated from Southern Oregon University with a degree in biology, the wine industry had taken hold in Oregon. Dobbles traveled to Europe to explore winemaking, first in Germany at Weingut Erbhof Tesch in 1985, then in Burgundy at Domaine Georges Roumier and Domaine des Comtes Lafon in the late 1980s, with a stint back home at Elk Cove Vineyards in between. When he came home from France, he held several jobs in Oregon before starting his own company in 2002. That company now encompasses Dobbles Family Estate, Wine by Joe and Jovino.

In June 2017, Dobbles launched a mobile bottling company, Dundee Mobile Bottlers, and last fall he stepped aside from day-to-day operations of the winery, although he's still a partner in the business. He's in the process of expanding the bottling business and plans to add a canning line.

**Q** In your mobile bottling company, you use a variety of closures. Which closures are you using for your own wine brands and why?

**Joe Dobbles:** For Dobbles Family Estate wines, we are currently using DIAM corks for the red wines and are transitioning to Stelvin for the white wines. We have been using the Stelvin with Saranex liner for a number of years on our Wine by Joe and Jovino brands.

The transition to DIAM was rooted in about 13 years of bottling my own wines and another 30 or so years of overall experience with corks. We con-

ducted small-scale in-house trials and looked hard at what other respected wineries were doing, as well as large custom-winemaking clients of ours using DIAM. Over time, it became a very easy decision. Every cork is the same. Every bottle tastes the same.

DIAM and other technical cork producers offer closures with varying degrees of oxygen transfer rates (OTR). This is a great tool. However, I am a firm believer that it is better to control the amount of oxygen your wines are exposed to during the winemaking and aging process and to not cross my fingers and depend upon a closure to take a

wine where I want it to go once in the

bottle. A few peers have told me

they want some dissolved oxygen (DO) pickup going into

the bottle. I don't believe

in this at all. If your wine

is still in need of some

air during the bottling

process, then how

much control do you

really have? How

much is enough and

how much is too much

for the future of the

wine? Are you mitigating

a higher DO pickup at bot-

tling with increased levels of

sulfur dioxide? I say give the

wine what it needs along the way,

then diminish the DO level to as low as

possible and put the wine into the bottle in its most

perfect state possible.

I have often stated that I think the most perfect

wine closure would be a 750-ml glass ampule —

nothing in, nothing out, anaerobic and only natural

polymerizations and aging process. Crown caps

are the second-best alternative, but this is more of

a marketing decision.

Cans are a new venture for the Wine by Joe brand

and have been quite successful to date. I look at

cans as the next frontier since screwcap closures.

**Q** In your mobile bottling business, what sorts of advice do you give to your customers regarding closures?

**Dobbles:** The theme of Dundee Mobile Bottlers is "bottling for winemakers by winemakers." My



team and I have many years of experience in making wine and bottling. However, to date we have only really given advance advice on the bottling of sparkling wines — crown cap versus a screwcap or traditional Champagne closure. We have advised customers away from screwcaps if maintaining higher amounts of carbon dioxide in the wine is important to them, such as in frizzante or semi-sparkling wines. For sparkling wines, we offer the option of crown cap or Champagne cork with a wire hood and the option of a foil hood.

**“Another consideration of DO pickup and the bottling process, especially with screwcaps, is the travel distance along the bottle conveyor between the filler and the capper.”**

— Joe Dobbles

The decision of a producer using crown cap versus a traditional Champagne-cork closure, in my mind, is primarily a marketing decision and a consideration of the cost of goods. Both have their place, and, of course, a crown cap keeps the cost down for a value-priced or thinner-margin sparkling wine.

**Q** Some of your customers prefer natural cork. What improvements have you seen with cork? What are the drawbacks at this point?

**Dobbles:** The Cork Quality Alliance and cork vendors have done an admirable job of improving the quality and consistency of 100% natural cork closures. I have no doubt that the increased acceptance of screwcaps by consumers and winemakers alike had a lot to do with lighting new fires to improve overall quality and decrease the incidence of off flavors and aromas due to TCA and other off characteristics.

One issue we have seen on the bottling line is corks that are too dry. This causes excessive cork dust, some of which ends up in the bottle, as well as chipping. Dry corks are also hard on the corking machinery. The danger of using corks that are too dry is maintaining a good seal and, of course, holding up during the aging process.

Dundee Mobile Bottlers highly encourages our customers to get their bottling supplies in-house well in advance of the bottling to avert last-minute surprises. We try to book a pre-bottling meeting with our clients. We offer the free service of measuring their cork humidity

levels with our Finna Group cork moisture meter, measuring the dissolved oxygen (DO) in their wines prior to bottling, and conducting an immediate post-bottling total package oxygen (TPO) analysis with a Hach Orbisphere 3100 LDO optical DO analyzer. We can also very accurately measure the pre- and post-bottling CO<sub>2</sub> levels of their wines with a Steinfurth CDA-MK6 analyzer. We also use the Steinfurth in advance of sparkling bottlings to dial in the “sweet spot” for CO<sub>2</sub> level in the bottle and to test the CO<sub>2</sub> level during bottling.

Over the years as a winemaker, I was frustrated when wines I made showed in a less-than-flattering state. Specifically, there was too high an incidence of overtly corked wines or, even worse, wines that weren't obviously corked but were diminished and devoid of finesse, with a lack of fruit. Consumers often don't understand that the cork is to blame, and they move on to the next producer. I have shared wines with highly experienced reviewers and critics who could not identify that a wine was not up to par because of the cork. Upon tasting a second bottle, their eyes lit up. Sometimes only the parent knows their child is sick.

I found this extremely frustrating because I wanted to stay with cork closures for the higher-end wines, although I had become an advocate of screwcaps. Over the years, I have done a lot of testing and found that as much as 10% of the wines had changed in character from the cork closure. I don't mean that 10% of them were technically corked and showing TCA, but they were changed or diminished.

**Q** How does the choice of closure affect the adjustments you make at bottling for things like SO<sub>2</sub>?

**Dobbles:** As winemakers/owners we put an incredible amount of blood, sweat, tears, money and reputation on the line. Too often, we see that we get the ball close to the end zone only to fall short by relaxing prior to a key part of the winemaking process — bottling.

The most important aspects of the bottling process are paying attention to pre-bottling DO levels and the amount of DO pickup at bottling. The type of closure and the technology of the bottling equipment both play a significant role in the total package oxygen (TPO) and therefore require separate but collective consideration relative to the amount of free SO<sub>2</sub> necessary at bottling. As a winemaker — and now a mobile-bottling-line owner — I am continually surprised by the lack of attention paid to pre- and post-bottling DO levels and the TPO of the final product.

How often have we had to apologize for a wine which has recently been bottled and is in prolonged bottle shock? How often have we seen young wines which reek of too much SO<sub>2</sub>?

I believe that the degree and duration of post-bottling shock and unnecessary elevated free SO<sub>2</sub> levels happen more often than necessary.

The most frustrating aspect as a winemaker over the years has been preparing wines for bottling which were showing beautifully and then “dumbing them down” in preparation for the bottling process. Specifically, the necessary evil of adding enough free SO<sub>2</sub> to protect the wine from the DO pickup during bottling and the recovery and journey back to its organoleptic ground zero many weeks or months later. Unfortunately, the bottling process and SO<sub>2</sub> necessary to mitigate DO pickup diminishes the wine along its continuum and prolongs the time that the wine is not showing all it has to offer.

When your wine is ready to bottle and the free SO<sub>2</sub> is stable, the best bottling scenario is to go to bottle with the lowest necessary free SO<sub>2</sub> level relative to pH, residual sugar, red vs. white and projected release date. One ppm of DO pickup at bottling requires 4 ppm of free SO<sub>2</sub> to mitigate.

## WHEN SCREWCAPS ARE LEAKERS

Winemaker Joe Dobbles of Dundee Mobile Bottlers in Oregon has experimented over the years with different screwcaps and liners, and he's using Stelvin now.

One unfortunate experiment was with a type of screwcap (not Stelvin) that advertised variable rates of oxygen transfer. “After a couple of years of in-house testing, as well as looking at other wineries' testing, we then went forward with a bottling,” Dobbles said. “Well, nobody ever thought of storing the screwcap-sealed case of bottles on their sides. Storing a screwcap-closed bottle vertically is normal, right? What a disaster. Nobody ever assumed that the closure would leak when the bottles were stored horizontally.”

Dobbles said his research on liners for the Stelvin has been done mostly through reading. “The Saranex liner is used more often and has a moderate oxygen transfer rate, with Saratin having a lower OTR,” he said.

He's currently using Saranex, he said, but wouldn't rule out using Saratin in the future.

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Wouldn't it be wonderful to be able to take your wine from its pre-bottling, fully expressive state and transport it into the bottle without any sacrifices? The key to this is diminishing DO prior to bottling and taking every step along the way to diminish TPO.

There are two types of bottling and filling technology: mechanical and electro-pneumatic counter-pressure lines. Dundee Mobile Bottlers owns and operates a 20-spout electro-pneumatic counter-pressure line. It's a newer and more advanced technology that utilizes head pressure in the filler bowl to protect the wine. It also allows for bottling of sparkling wines without loss of carbonation.

All mobile bottling lines are capable of sparging the bottle with inert gas to diminish the oxygen content within the bottle. Mechanical filling-line technology creates a light vacuum on the bottle, pulling the inert gas and the remaining oxygen from the bottle into the filling bowl while filling. After the initial sparge, the newer electro-pneumatic counter-pressure filling valves pull a vacuum on the bottle at the filler bowl twice prior to filling. Each evacuation is expelled external to the filling bowl, followed by a sparge. The net effect is significantly lower DO, leading to reduced bottle shock, lower necessary free SO<sub>2</sub> levels at bottling and wines which show better sooner, without sacrificing ageability.

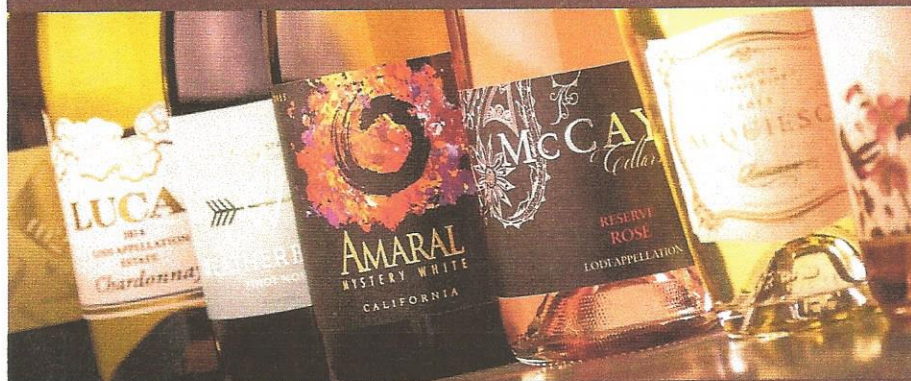
I have found that screwcap-finished wines have a greater potential to pick up increased levels of DO versus corks because of the higher volume of head space between the wine and the closure. That usually requires a nitrogen drip post-filling to mitigate DO pickup when bottling with mechanical filling valves. Electro-pneumatic filling technology eliminates the necessity and extra cost of the nitrogen drip because the DO pickup is so low. Therefore, careful consideration is necessary as to how much additional free SO<sub>2</sub> is necessary to mitigate DO pickup.

Cork-finished wines have a smaller headspace and require a vacuum to be pulled prior to inserting the cork, further diminishing the amount of potential DO pickup during bottling. Natural cork closures contain a small amount of air within the cork, which slowly finds its way into the wine.

Another consideration of DO pickup and the bottling process, especially with screwcaps, is the travel distance along the bottle conveyor between the filler and the capper and the timing of the placement of the screwcap onto the bottle prior to the final application. The sooner the screwcap is applied, the lower the DO.

You need to know the limitations and parameters of the equipment when bottling your wines. Research, measure and understand the DO pickup levels, and take this into consideration with the closure. ☺

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