

Oak barrels in South Africa: less is more

By Dave March CWM

The demand for oak barrels in winemaking in South Africa has fallen by more than half in the last ten years.

In 2006 there were around 42,000 barrels coming into SA each year, now the figure is around 20,000.

The decrease, however, is not entirely negative. The figures reflect changes in barrel use rather than a rejection of oak. Oak in winemaking is still *de rigueur* for many wines, but it is being used differently.

Clinton Le Sueur, Sales Manager for Chene South Africa (part of Chêne & Cie), suppliers of barrels and alternatives to more than 120 producers in SA from Cederberg to Hermanus and Robertson to Cape Point, has noticed big changes in the demand and use of oak barrels in South Africa.

Firstly, fewer barrels, yes, but smarter use. There is increasing use of larger vats than the French *barrique* (225ltrs) to provide the required oxidation and polymerisation effects of oak whilst reducing the aromatics and flavours new oak can impart. In the past, 90% of SA barrels were 225L *barriques*, now it is 50% and 40% more are 400L. The *Foudre* is popular, holding 600 to 5,000 litres, and the reduced surface to liquid contact means less 'oakiness'. Winemakers want the phenolic and structural effects of oak without the vanilla and coconut hit of old, says Clinton. Larger barrels means fewer barrels. It isn't about saving money, necessarily, larger vats may outlast *barriques* (many around the world are decades old, some more than one hundred), but initial costs are around the same. For example, the Chene Ovum 'egg shape' vat once thought to revolutionise winemaking, may hold eighteen barrels worth of wine, but it costs €33,000 (around R470,000), that's twice as much as *barriques*. Many producers are switching to 600L vats, and using them in combination with steel vats; Sauvignon Blanc is going this way and Clinton believes Shiraz gives of its best fermented in 4-600L vats. Oak vats like this are being used for fermentation and aging, quickly softening and encouraging MLF for wines that are quick to market. Oak ferment "helps iron out the closed stages of some wines and helps dissipate unwanted odours that might only come out in bottle otherwise", says Clinton. He is seeing many producers of Italian varietals switching to larger oak formats.

Smarter use of oak means winemakers are upscaling. Instead of say, 40% new oak on a wine, maybe it is now 30% but better quality oak. Similarly, less doesn't mean a smaller marketplace. Many wineries choose from more than 15 cooperages, even for a few dozen

barrels and there are some 50 cooperages represented in SA. Some 80% of wineries will have oak from two or three different countries in their cellar. Only a couple of wineries here always select barrels made from one forest, in one country by the same cooper, most diversify. Though “playing with sources, sizes and toasts doesn’t help”, says Clinton, “the last thing a winemaker needs is to worry about barrels – and there are just too many variables going on. If anything, winemakers want maybe 3 to 5 variables in type of oak, size, origin and toasting”.

Oak is being used to add structure and modify the phenolics of the wine, and not to mask odours or impart character to the wine. Winemakers may now hold barrels from Eastern Europe, the US and France and mix and match. Whereas this entails buying barrels from various countries where traceability and pinpointing their source is difficult (especially with US barrels) some are instead ordering barrels already made up of staves sourced from different regions or even countries. It is possible to order a barrel consisting of 1/3rd Hungarian wood, 1/3rd US and the rest of it from two different French forests. This reduces storage and saves barrel costs and offers the chosen phenolic variations.

Clinton has noticed major changes in barrel toasting, too. Toasting over a flame can be done at much lower temperatures for much longer, sometimes an hour or more. This is more penetrative on varied thickness staves (instead of effecting 3mm of the stave, now 8mm is possible), gives a more even toast and makes the flavours less raw.

With barrels costing some R11-16,000 each is there an increase in the use of alternatives such as staves, chips, powder and liquid oak? Surprisingly not, says Clinton. Alternatives play a large role in commercial, lower priced wines where Clinton believes probably 90% of wines get such treatments during or after ferment. Using oak in this format helps MLF, gives colour, aides polymerisation and can soften wines, and Clinton stresses we use them more cleverly now, such as mimicking the barrel stave dimensions accurately and understanding the role of lignin cells within the wood and how to use the stave within the tank.

More whites are seeing time in barrel or oak additives, whereas reds are seeing less time in oak. Two years in oak for top wines is now the exception, with around a year the norm, and 6-9 months usual for suitable whites. This is partly because the choice is for medium grained oak – allowing a degree of porosity and quicker modification – rather than the tighter grained versions meant for longer aging.

Despite economic constraints, cheaper oak alternatives, a resurgence of concrete vats and less time spent in barrel, it is certainly not the end of the oak barrel. Clinton says some 40% of his clients are still ordering 40 to 60 at a go and one received 400 barrels for this vintage. There seems no alternative in sight to match the magic that occurs in a real barrel.