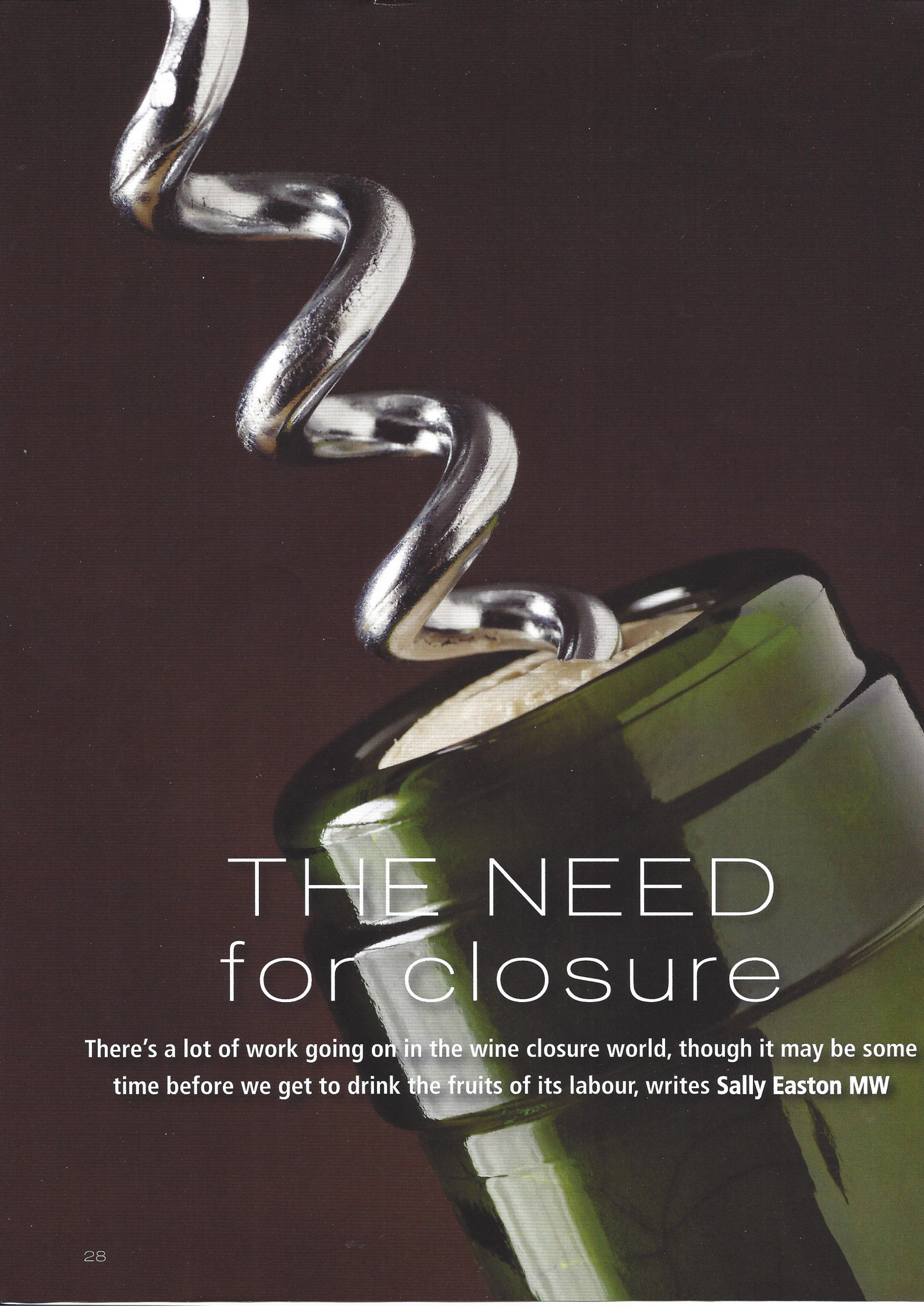


the drinks business

ISSUE 145 · AUGUST 2014



www.thedrinksbusiness.com



THE NEED for closure

There's a lot of work going on in the wine closure world, though it may be some time before we get to drink the fruits of its labour, writes **Sally Easton MW**

TCA ET AL seem to be hanging around in the corner, or even, dare one suggest, drifting off in a state of ennui. Oxygen Transfer Rate (OTR) is the bigger fish these days. Meanwhile sustainability issues continue to provide more innovative excitement than anything to do with TCA ("corked" wine).

External, third party validation of OTR rates has become the norm for most – just part of the product spec these days. Offering a range of options in the OTR department is also becoming the norm. Nomacorc has supplementary whizz-bangy kit that allows winemakers to input broad winemaking details. An algorithm churns out the best fit of its closures from a range of four OTR options on the company's Select Series. Amcor also now offers four OTR options for its Stelvin screwcap, but presents them as

market sector. As well as aluminium quality for the stopper construction, we know the seal is provided by the liner. SaranTin and Saranex liners have long been the only choice. But in 2013, Amcor, the manufacturer of Stelvin, launched four new liners with different OTRs.

The OTRs of Stelvin Inside have been measured by France's LNE (Laboratoire National de Métrologie et d'Essais) at a SaranTin equivalent of <0.0005 ccO₂/day for its 1O₂, up to 0.05 ccO₂/day for the 7O₂. 5O₂ is equivalent of Saranex at 0.005 ccO₂/day with 3O₂ offering an OTR between that of SaranTin and Saranex (~0.0005 ccO₂/day). Didier Ruffy, Stelvin's R&D manager explains that 7O₂ was developed "in response to a request from the USA market to test a liner with higher permeability than Saranex in order to age the wine." The company's

communication manager Karen Quirchove adds "some synthetic closures are in the 7O₂ area. There are no other aluminium closures in this arena. It is a new range for us to cover."

On the back of work such as this by Amcor, it becomes even more important for producers to consider their liner specification.

These are also undergoing commercial trials in wineries across the world, having been

launched to the trade at the beginning of 2013. Quirchove says that "several million have been sold in USA, Europe and Australia. Producers are testing them." Ruffy adds: "for whites, we could get some answers in 18 months; for reds it will be longer." Typically, he says, wineries are testing all four liners, which are available only inside the original Stelvin closure, i.e. not StelvinLux or StelvinP for semi-sparkling wines.

NATURAL CONSISTENCY

OTRs are all about consistency. The challenge of single piece natural cork is consistency, because it's natural. Composite corks (bits of ground up cork

Feature findings

- ▶ Oxygen Transfer Rates (or OTR) and issues around sustainability are the hot topics in today's wine closure discussions.
- ▶ Aluminium screwcaps are now allowing for as much control over OTR as other closures thanks to developments in inner linings.
- ▶ TCA in natural cork is being further brought under control by barrier membranes applied not only to the end of the cork but also on the sides.
- ▶ Debate remains about how best to seal wine designed for fast consumption: low permeability for a guaranteed shelf-life or high for a smoother-tasting product.
- ▶ Part synthetic and part natural stoppers are the latest innovation to allow OTR control and sustainability.

glued together – technical agglomerate corks) are typically consistent. Membrane barriers, added to the end of corks, aim to add consistency to cork as well as a specific OTR performance.

A couple of membrane producers have been around for a while. They add a barrier membrane to the ends of single-piece natural cork or composite corks, which typically have previously undergone some sort of TCA cleansing process such as steam distillation.

The membrane provides a consistent OTR, overcoming the key inconsistency criticism of single-piece cork. In the last decade the Procork stopper has evolved, notably with a coating being applied around the sides of the cork. Gregor Christie, Procork's CEO, says the "side coating reduces the amount of vapour that moves up and down the side, providing some degree of barrier. In

Screwcaps often get bundled together, but all things are far from equal in this market sector

options. It's up to the winemaker to know his/her wine and to choose the most appropriate liner for it.

With such step-change innovation, it takes time for producers to evaluate the results. Amorim's Helix, which launched at Vinexpo 2013, is in trial at more than 50 wineries in Europe. This is a cork that needs no corkscrew and is targeted at the capacious £5 to £10 sector. It does need a special bottle with an internal thread in the neck bore. But a cork that competes with the utter convenience of screwcap, both opening and resealing, is real innovation.

Screwcaps often get bundled together, but all things are far from equal in this



combination [with the end membranes] it works well, and we don't get taint issues." A criticism of the membrane barrier only being on the end of the cork is that TCA on the uncoated side might contaminate the end membrane of other stoppers in a bag. TCA would absorb to

In the last decade the Procork stopper has evolved, notably with a coating being applied around the sides of the cork

the membrane and desorb into the bottled wine. But "TCA is not something that happened a lot. Wineries are more driven by oxidation and consistency" which the membrane addresses, Christie adds.

Procork comes in a range of OTRs. Its recommendation for fast rotation wine,

Christie says, "is a very low permeability approaching a tin foil screwcap. This is counter to what some plastic cork manufacturers suggest, where they promote the extra permeability allowing the wine to smooth off quicker for quick consumption." However, she continues: "We suggest the opposite because that work can be done in the winery where it can be more controlled and the wine prepared for bottling in a forward state exactly as

Style with substance

For pure elegance of appearance and style, little else beats Vinolok. Since the company's purchase by specialist cut crystal-producing company Preciosa in 2011 – who have manufactured the stoppers since their introduction to the market in 2004 – re-invention has been the driving force. Kateřina Slezáková, Vinolok's marketing specialist, says an early innovation was to "widen the range to standard bottles" because a limiting factor for the original incarnation had been the necessity for a special bottle neck with an external "bobble".

Today a range of more than 30 bottles exists for both wine and spirits from a selection of preferred bottle manufacturers. This is done in order "to control the quality, mainly of the inner shape of the bottle neck," explains Slezáková, who notes that Vinolok now fits multiple different neck bore diameters.

Testing by AWRI of the new kit, including liners made of a different material, found OTR rates that were "consistent with levels typically seen for some agglomerate (technical cork) and synthetic closures".

Vinolok now comes in a rainbow spectrum of different colours which undoubtedly adds a huge amount of marketing appeal.

the winemaker wants. The low permeability cork can hold that state for longer than a high permeability cork, so the low permeability can give a longer shelf life."

The Corkguard (formerly known as Bacchus) barrier membrane was re-launched earlier this year. This

Trade talk: How important a factor is sustainability in the development of new and existing closures?



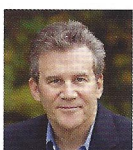
CARLOS DE JESUS, MARKETING DIRECTOR, AMORIM

Every year, sustainability becomes an increasingly important issue around the world. Across all industries, a positive contribution to environmental responsibilities represents a vital competitive edge for producers. In the wine trade, this ensures the viability of one of the world's most robust sustainability narratives, the cork forests and the resulting 100% natural cork stoppers. We are increasingly working with our client wineries to incorporate this unique benefit into their own market positioning and customer communication. In many countries, from the US to France and even China, this dialogue is already bearing fruit, with very positive results.



GREGOR CHRISTIE, CEO, PROCORK

Sustainable activity is an industry responsibility because sustainability will always come at a cost. It is a sad economic reality that giving the consumer a choice to buy sustainably or not is actually a cop out for the industry. There will always be enough consumers who buy at the lowest price irrespective of the consequences. Being in the chain to the consumer means the distributor and retailer also have a responsibility. ProCork is an innovative development that improves natural cork, which is sustainably harvested from the cork forests of Europe. We are banking on the continued use of cork in the high quality end of the wine market.



JEFF SLATER, DIRECTOR OF GLOBAL MARKETING, NOMACORC

Pursuing sustainable practices is a core tenet for Nomacorc. The company is constantly trying to lower its environmental impact through improvements in both product and process. As a result, Nomacorc developed the world's first zero carbon footprint wine closure, Select Bio Series. Containing the same performance benefits as other Nomacorc products, including taint-free, consistent bottle aging and a choice in the optimal oxygen ingress into the bottle, the Nomacorc Select Bio closures are fully recyclable and composed of renewable, plant-based biopolymer materials derived from sugar cane. Nomacorc continues to work towards lowering its carbon footprint by using renewable energy sources such as wind and solar panels.



FRANCO BOVE, COO, GUALA CLOSURES

We have drawn up a long-term sustainability strategy, which has led to the definition of specific measurable objectives that cover the three dimensions of sustainability: social, environmental and economic. Guala Closures' commitment to sustainability was launched initially in our four Italian plants with the objective of building a reference model that we could then gradually extend to all group branches. We have set in place important initiatives such as the first and only eco-friendly label top, which will help to offset carbon emissions. In 2012, we created a green team, which includes representatives from all departments.

technology is newly available as Smartcork corks. The Smartcork company adds Corkguard to single piece corks, "transforming low grade corks to high grade corks" according to David Taylor,

managing director of Corkguard Technologies. The OTR is stated at 0.002 ccO2/day, equating to 1 to 3 years' shelf life. Taylor adds that membranes with different OTRs are likely to be available

Diam plays the long game

Diam is going down the longevity path. It has long since gone past TCA issues with its supercritical carbon dioxide cleaning process. It has also offered different OTRs for a while. The latest incarnation is the Diam30 which has been developed for long bottle ageing of grand cru style wines.

Dominique Tourneix, director general of Diam Bouchage says: "The most recent release [beginning of 2014], has been Diam30, with a mechanical guarantee of 30 years. This has been developed using an accelerated ageing process methodology that is inspired by the aviation industry, exerting a mechanical compression under high temperature. We have been able to design the required elasticity of the cork structure to achieve 30 years sealing guarantee."

Where wine is stored below 15°C, no leakage is guaranteed. Additionally it has a very low OTR, stated at 0.0004 ccO2/day.

So far, reports Tourneix, "nearly one million Diam30 have been sold, representing 50 clients from Italy, France, Australia, Switzerland, Germany, Spain and USA. Orders from each client are small as they are destined for their premium brands."

This programme will stretch the boundaries of real-time trials – don't expect any news any time soon.

David Taylor, the managing director of Corkguard Technologies, says that membranes with different OTRs are likely to be available within a year