

From Nord Emballage Issue #4 2021

SVALINN'S NEW CLOSURE GIVES BRAND OWNERS NEW OPPORTUNITIES

In July 2024, new UE legislation rules will be introduced requiring that all bottle caps remain on the package after opening. This will require a lot of thinking in the industry, including companies that manufacture liquid packaging. For the manufacturer or brand owner who wishes to take a step further in the development of their packaging, the start-up company Svalinn Cap Systems AG has the solution. Their CueCap represents innovative thinking in many areas.

Svalinn themselves claim that their **CueCap** is a revolutionary cap technology that offers the highest standards on safety, convenience, efficiency, and sustainability. Behind the relatively new company are two industry leaders in beverage cartons, Börge Kvamme and Israel Komet. Börge has worked in the past for Elopak and when he was given the position as chief executive for Elopak Europe/MEA, he quickly established a business unit named Elocap, in charge of developing closures for the company's gable-top packaging. He established a partnership with an Israeli plastic packaging company, and eventually, more than half of all Elopak's caps were produced as part of this activity.

"After a while, Elopak took the for me strange decision to stop producing the closures themselves. After leaving Elopak, I have experienced an interesting period in the flexible packaging industry as the CEO of Coveris, Finnish Amerplast and Capri Sun's Pouch Partners", he says.

"I have launched in parallel a partnership with Israel Komet, who had been working with me at Elopak and who in the meantime also left Elopak, but continued to design smart closure solutions. When we met again almost five years ago, he presented me with this solution, which led us to the decision of founding Svalinn, a start-up company focusing on the production of caps & closures for the gable-top packaging".

It's time to come up with something new

According to the two co-founders, who are the majority owners, not much has happened in the closures field in a decade and it was time to come up with something new. They found strong financial partners and have patented their technology worldwide. It needs a lot of capital to launch this type of activity, injection molding having high initial costs. Quickly, they also established a strong relationship with the Norwegian dairy group Tine, which became a test partner during the development work. Tine also became the first client when the company established itself in the market and Svalinn got the volume it needed to move forward. The intention is that all Tine's gable-top packaging will be fitted with Cue Cap closures.

Keep the caps

According to Norse mythology, Svalinn (Norse: Svalinn, "the cooler, the one that cools down) is the shield that stands in front of the sun to not burn everything on earth, and the reason why it chose that name is that it sees itself as protecting the contents of the package while providing added value to it. The content protection is important, that was the main argument when the closures became part of the liquid packaging many years ago. Today, we observe a reverse trend, with a few brand owners removing twist caps, often on the grounds that consumers do not want plastic, arguing that after all it does not offer much protection for the contents.

This means one are now arguing against yourself. It's probably more about seeing an opportunity to make cost savings. Svalinn and Börge Kvamme does not believe in the argument that there is no difference in the content protection with or without screw closure. To prove it, they recently commissioned the well-known microbiology laboratory Sure Laboratories in the Netherlands to carry out a test, measuring bacterial growth in packaged food, five and ten days after a package without a cap and one with a cap had been opened. The result was strongly in favor of the screw-cap packaging.

- "The test results were nearly sensational. Bacterial growth was dramatic where the packaging without a cap had been touched by fingers on opening. We didn't expect such a big difference, it's almost as if there should be a text on the packages saying to wash your hands carefully before opening them."
- Removing screw caps is undoubtedly taking a step backwards in development.

Twist caps provide spectacularly good food protection.

There is currently a trend where brand owners choose to remove screw closures from their liquid packaging. A new study shows that it may not be such a good idea.

When the closures were introduced quite a few years ago, one of the main arguments was that it provided better protection for the food and extended its shelf life. Today's argument is that sealing has little impact on this. A study commissioned by Svalinn from Sure Laboratories, in the Netherlands, shows interesting facts that contradict this statement. Sure is a microbiology lab and they tested two equivalent packages, one with and the other without the screw cap. Opening the package without a cap means that fingers come into contact with surfaces through which the contents pass when they are dispensed. The packages were stored in a refrigerator for ten days with temperatures between two and height degrees Celsius.

Opening a carton of fresh milk without a cap resulted in an initial contamination of twenty thousand CFU (colony forming units, which describes the number of viable bacilli or fungal cells in a sample) in five milliliters during handling, while milk in the screw-capped carton showed very low contamination. The initial contamination in the first package then grew rapidly to a level of over two hundred million bacteria per package.

After five days, milk from the screw-top packaging had less than a hundred bacteria per five milliliters or milk. The alternative figure was two hundred and sixty thousand. After ten days, the figure was about one hundred bacteria per five milliliters, while the corresponding figure for the pack without a closure was one million eight hundred thousand.

The tests show that a seal is useful in terms of food safety. In addition, it presents a high degree of convenience for the consumer.

Several advantages

What are the benefits of the Svalinn's Cue Cap closure? There are several, according to the company:

- "- The first one is product safety. We have a very smart tamper-evident band. When you open the packaging for the first time, you hear a strong click, and you can easily see if the cap has been tampered with e.g. that it has been opened before. That clearly sets us apart from other solutions in the market.
- The second one is consumer convenience. Our closure is higher and requires only half as much force to open. During consumer tests, we've come out winners and as one

example our partner Tine has received grateful emails from the elderly and people with weak hands.

- The third factor is sustainability. We use less material than most other solutions and a big part of what we produce is based on bioplastics. We could run everything with this material if there wasn't a shortage of it. CueCap is also thirty to forty percent lighter than alternative solutions.
- Moreover, we are working on several exciting projects with biomaterials. We're almost finished with a new project and it will be a sort of revolution in the industry.
- Another advantage is that our closure is easy to incorporate into existing production. It is easy for a dairy to convert their filling machines to our solution. We stick our head out and say we can reduce our customers` production costs.
- These are factors that we will build on to position ourselves as the best closure solution for gable-top packaging, but also, in the future, for other packaging."

"Given our background, it was natural to start in this way, but in the future, we will target new areas, in particular aseptic packaging, which is a slightly more complex area," says Börge Kvamme.

"The market to enter is wide, with billions of gable-top packs produced globally each year. A large proportion of these are aseptic, so there is certainly reason to focus even more on this area in the future."

Other production lines setting up

The Svalinn closures are currently produced in two manufacturing sites in Europe, one in northern Spain and the other in France, where the company will soon have production lines for tethered caps, caps that remain attached to the packaging after opening.

- "The tethered caps are currently putting a bit of pressure on the industry, but for us newcomers it's only an advantage. Any investment we make now is aimed at that technology.
- "We are expanding very quickly and we're finding that a number of big brand owners appreciate that someone is taking the lead in this area."

A welcomed solution

"Here in Europe, we work directly with the big brands, while globally we focus on partners." Börge Kvamme concludes: "We come up with new solutions that are appreciated. This makes us looking to the future with optimism."