

Design for recycling – sustainably packaged organic products

Open to change — Schmälzle in Pfullingen is breaking new ground. Not with its exceptionally tasty meat, sausage and convenience products, because as a matter of principle, they are already excellent when it comes to quality, freshness and flavor. There was, however, potential for optimizing the sustainability of the packaging for these products. As a first step, the modified atmosphere packaging (MAP) for two popular product variations of organic Leberkäs cold cuts was replaced with a recyclable solution based on polypropylene. The printing for this packaging is also sustainable thanks to SÜDPACK's pioneering SPQ technology.

The previous packaging concept, which was based on an APET/PE composite, was not recyclable. An all-in-one PP solution from SÜDPACK, however, most definitely is. And it is precisely this material that is now used to make the new MAP packaging for the organic Leberkäs from Schmälzle Fleischwaren GmbH.

The thermoformed bottom web provides enough stability to present the cold cuts in the refrigerated section, while the peelable, high-performance top web is particularly thin and therefore offers exceptional material efficiency. "Compared to the material that had been used, the new packaging concept reduces the packaging weight by six percent – an amount that certainly has

a positive impact on DSD fees," explained Holger Hoss, Head of Strategic Product Management at SÜDPACK. Moreover, "replacing APET with PP has an additional positive effect on the environment due to the lower CO2 equivalents of polypropylene," added the film specialist.

Schmälzle – a true innovator with high standards

Founded on Christmas Eve in 1931 and now successfully managed by the third generation, the family-run business has a particularly strong commitment to sustainability: "Even though our products continue to meet the highest standards, we would still like to make our company more sustainable. This is the only way we can carry on our family tradition with a clear conscience and offer people good everyday food. To us, the packaging of our meat and sausages, our ready meals and our vegetarian and vegan products is an essential element of an innovative, responsible and future-proof concept," said Lukas Myrcik, who is responsible for packaging development at Schmälzle.

Rethinking the tried-and-tested, remaining open to new ideas, courageously breaking new ground – the company's success has confirmed its approach. Schmälzle is now a sausage supplier, a restaurant operator, a supermarket and a ready meal supplier with a total of 300 employees.



Customer Report

Or, as Lukas Myrcik likes to emphasize, the company is "a true innovator with strong principles that has wholeheartedly and repeatedly made an impact on the market for more than 90 years with fresh products, natural ingredients and hygienic production."

Multi-faceted added value – thanks to SÜDPACK

With the new packaging solution, Lukas Myrcik is also underscoring his standards in terms of sustainability while benefiting from several advantages. Thanks to the use of the PP-based mono-material, the holistic packaging concept with perfectly harmonized top and bottom webs is certified with a recyclability of more than 90 percent. This aspect can be advertised to the public, which garners positive feedback at the point of sale.

Thanks to their excellent thermoforming capability, the high-performance films can be processed on the existing packaging machines at Schmälzle without any major modifications. They offer optimal mechanical and functional properties such as good puncture resistance, which just like their exceptional sealing performance, ensure high packaging reliability along the entire process chain. Furthermore, the use of a peelable top web makes it easy for consumers to open the package. Another advantage is that the sturdy packages stack and transport well and can be presented attractively

in cardboard displays at the point of sale.

Last but not least, a high oxygen barrier is integrated into the film to provide optimal product protection and a long shelf life for the Leberkäs cold cuts. "This allows us to protect our products from premature spoilage – and our society from unnecessary food losses. In my mind, that is also a part of sustainability," emphasized Lukas Myrcik.

Package printing is also sustainable with SPQ

To maximize sustainability, the decision was made in Pfullingen to also use SÜDPACK's innovative SPQ technology, which was honored with the Gold German Packaging Award shortly after its market introduction in 2021. Moreover, SPQ has been distinguished as a striking project of excellence since November 2022 within the scope of the "100 Companies for Resource Efficiency" project, an initiative that was launched by Baden-Württemberg's state government and its leading trade associations. "Rightly so," commented Bernhard Kleinsang, who is the Area Sales Manager at SÜDPACK. After all, "our innovative printing process is a true 'milestone' in package printing due to its sustainability."

Using the technology requires the complete standardization of machine and process parameters as well as smart color management with a standardized color palette. This results in fewer color changeovers and a

reduction in solvent consumption — while also considerably improving the quality level. Yet another advantage is that printing plates can be produced using a water-based process instead of with solvents. In addition, solvent consumption is also reduced in the cleaning process.

For Lukas Myrcik, these were the determining factors for taking package printing to a new level for the high-quality organic product. "After all, we are one of the first food processors in the market to have switched to SPQ for the sake of environment."

Bernhard Kleinsang added: "As a whole, the reduced consumption of ink, solvents and energy as well as reduced film waste and less work for printing adjustments have a direct impact on the carbon footprint of

the printed packaging films." According to internal calculations performed by SÜDPACK and depending on the operational performance of the printing machines, this comes in at 32 to 42 percent for Schmälzle – an impressive amount.







The result – a recyclable overall concept

From the very beginning, it was clear to everyone involved that it would take some time to implement such a complex project. It was after Bernhard Kleinsang presented SPQ technology at Schmälzle for the first time in late 2020, however, that things started to pick up speed. "From the very start, we deliberately developed the new solution to become a recyclable overall concept that works well with the high-quality organic product to be packaged." "Thanks to SÜD-PACK's development expertise and excellent collaboration with the application technology department, switching to the new packaging concept was easier than initially anticipated," summarized Lukas Myrcik.

It was possible to approve the first printed images after just a few months. The usual procedure then followed: sampling, inspection from an independent laboratory to confirm compliance with best before date and microbiological specifications, shelf life testing and, finally, industry testing. The packaging for the Leberkäs are now in stores — and meet not only the ambitious requirements of Lukas Myrcik and his customers, but above all the statutory requirements for recyclability..



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