

Packaging Materials

Best  
practice

# Monomaterial packaging: Saving costs, conserving the environment



Sustainable packaging solutions conserve the environment and save costs in the pharmaceutical and biotech sectors. The Business Area Pharma of the international technology group Körber offers cardboard packaging solutions that are suitable for almost all types of machines. Patric Buck is one of the people behind these solutions. With lots of creativity and expertise, Buck and his team design customized folding boxes for customers. In doing so, they use sustainable monomaterials that enable companies to improve their carbon footprint and also avoid the EU plastic tax.

In his work, Patric Buck combines technical expertise with creativity. As Head of Innovation for Packaging Materials at the Körber Business Area Pharma, he and his five-member team develop folding boxes for medications. This is a task for which he has to take many factors into account, from aesthetic aspects for the design to transport safety and the boxes' manufacturability in the production process. There's also another aspect that characterizes the packaging solutions from Körber: "They are all made of recyclable cardboard, which means they contain absolutely no plastic," says Buck.



**Patric Buck**  
Leiter Innovation für Verpackungsmaterial  
im Körber-Geschäftsfeld Pharma

**80  
Cents**

**per kilogram of plastic packaging can be saved by pharmaceutical and biotech companies starting in January 2021, because the sustainable cardboard packaging from Körber is not subject to the EU plastic tax.**

Together with his team, he is promoting the trend toward environmentally friendly packaging. This is an important task because around 350 million tons of plastic are produced worldwide each year. A significant portion of this plastic ends up in the environment as waste. Beginning in January 2021, the EU will therefore introduce a plastic tax of 80 cents per kilogram of non-recyclable plastic packaging in all of its member states. Environmentally friendly cardboard packaging will enable pharmaceutical and biotech companies to avoid these costs. However, many companies also want to make an additional voluntary contribution to more sustainability.



Packs with flute blanks are the stars in the portfolio. These flutes prevent the products inside the packaging from shifting or touching the packaging.

#### **Multitalented monomaterials made of cardboard**

The raw material that Buck uses for his ideas comes from trees that grow in the Black Forest, in Austria and in Scandinavia. "It can be turned into a cardboard that is made of renewable resources and manufactured in a resource-conserving manner. Moreover, it fulfills all of the standards for the safe transport of pharmaceutical products," says Buck. Another advantage is that it is a "monomaterial." Many types of plastic packaging are a mix of different plastic materials, which causes problems during waste separation. Monomaterials are made of only a single raw material and can therefore be more easily recycled. This also prevents violations of the REACH chemicals regulations. The packaging consists of a monomaterial, which makes it easy to recycle and prevent violations of the REACH regulation.

#### **Every millimeter counts**

Creating a folding box is a demanding and complex process. "At the beginning of a project, we hold in-depth discussions with the customer so that we can precisely understand their requirements," says Buck. The following development phase focuses primarily on creating the construction design and combines precise data analyses with cutting-edge design thinking methods. The developers' expertise and sector experience also play an important role during the creation of a box. "Our know-how enables us to create customized solutions that are precise down to half a millimeter so that they can be smoothly integrated into the customer's production process," explains Buck. The team can draw on a comprehensive portfolio of concepts for the subsequent construction design. "Our great variety of construction types enables us to cover around 90 percent of companies' packaging processes," says Buck. This provides customers with many advantages, because they don't have to modify their machines.

**The packaging solutions from Körber are suitable for around**

**90%**

**of packaging machines at companies. The great variety of construction types enables almost all machines to be immediately filled with the sustainable cardboard packaging without requiring any modifications.**

### The right type for every occasion

Packs with flute blanks are the stars in the portfolio. They are suitable for topleading machines, which automatically put the folding boxes in an upright position and glue in the flute blanks. Körber offers its customers a topleading service for this purpose. In this service, the Dividella NeoTOP packaging machine puts the packs reliably and cost-efficiently into an upright position, after which the packs are shipped to the customers so that they can be filled with pharmaceutical products. This service is offered not only to large companies that place orders for more than 10,000 packs, but also to customers that place smaller orders of about 200 packs. "Small lots are becoming increasingly important in this sector," says Buck. "They are used for marketing studies, clinical studies, and market launches, for example. We develop flexible packaging solutions for this purpose at short notice."

Körber also offers cardboard inlays, which, depending on the requirements of the downstream production process, can be placed in an upright position by hand. Moreover, the company supplies innovative natural fiber trays, which consist of paper that has been processed by means of injection molding so that it can take on many different shapes. The trays are compostable and like the cardboard inlays, can be filled by top-loading and side-loading machines.

### On track to a plastic-free future

Körber has been a pioneer in the area of sustainable production chains for more than 40 years. "For us, resource-conserving packaging isn't some trendy topic. On the contrary, it's part of our DNA," says Buck. This commitment has been honored with awards such as the Pro Carton ECMA Gold Award and the Pharmapack Award, which have highlighted Körber's innovative packaging solutions. Moreover, Körber's plastic-free packaging fulfills the claim of the Business Area Pharma: Delivering the difference. That's because the cardboard folding boxes enable companies to deliver the decisive difference when it comes to packaging. By using safe and sustainable cardboard packaging from Körber, pharmaceutical and biotech companies are helping to promote sustainability, thus ensuring that their products are well received by consumers.

### Körber - delivering the difference in pharma



Any questions? [Get in contact with us.](#)  
We'll be happy to advise you about our solutions and services:  
[info@koerber-pharma.com](mailto:info@koerber-pharma.com).



Patric Buck and his team design environmentally friendly folding boxes that enable companies to avoid plastic waste and save on taxes.

# We have you covered, always and everywhere

With local pharma software experts around the world we support you wherever your business is located.



### About Körber

Körber is an international technology group with around 10,000 employees and more than 100 locations worldwide. At the Körber Business Area Pharma we are delivering the difference along the pharma value chain with our unique portfolio of integrated solutions. Spanning in-depth expertise in consulting, inspection, handling, packaging machines and materials, track & trace and software, we always have the right solutions to unlock the potential of our customer's productivity. With our profound understanding of pharma processes and regulation challenges, Körber is the right partner for leveraging all potentials of global pharma and biotech productions.

### Delivering the difference in pharma

At Körber Pharma, we deliver the difference along the entire pharmaceutical value chain by offering a unique portfolio of integrated solutions. Based on in-depth experience spanning consulting, inspection, transport systems, packaging machines and materials, track and trace and software, we understand the challenges in pharmaceutical processes and regulation that our customers face day to day, from the beginning to the end of their production. For them, we deliver the difference to unlock the potential of global pharmaceutical and biotech manufacturing.

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