



Focke's box in box flexible packer (model 551) effectively combines two hinge lid packers

FOCKE RETHINKS SUSTAINABLE PACKAGING

How sustainable can packaging for tobacco products be? The engineers at German packaging machine manufacturer Focke & Co say that balanced paper-based solutions protect the product just as well as they protect the environment. Rethinking cigarette packaging could be as simple as a return to the roots.

It was not long ago that all consumer products were packaged in paper. More recently, cheaper manufacturing processes resulted in plastic being used as the main packaging material, and with this development came the misconception that packaging which lasts forever, and which can only be destroyed by thermal disposal, must be better. However, the team at Focke stated that packaging now appears to be returning to its paper origins, and that consumers prefer to purchase a sustainable product.

PAPER-BASED SOLUTIONS FOR TOBACCO PACKAGING

Examples of Focke's solutions for sustainable paper-based packaging include the sealed bundle wrapper (model 502), which teams up with the tray packer (model 556) to provide a flow wrap solution for sealed bundle packages that use either conventional or sustainable paper packaging. Using a virgin fibre paper, this solution is able to

produce packs that are considered single material packaging at speeds of up to 500 ppm.

The box in box flexible packer (model 551) effectively combines two hinge lid packers and represents an alternative to the sealed bundle. With a production capacity of 500 ppm, this paper packaging solution provides what Focke describes as a consistently high product quality for reclosable packages.

The company has also been working to further optimise the materials used in its

solutions, which also helps to reduce the risk of unwanted substances seeping from the packaging into the product. Here, an inner liner can be omitted, or the grammage of the blank or inner frame can be reduced. When it comes to packaging film, a paper or cellophane wrapping can be used instead of PP parcel film. Cellophane was previously a standard material for film, and using it ensures that health warnings are still visible because the material is naturally transparent.

In the RYO/MYO segment, Focke has developed a solution for paper-based films that include coating. Here, an ultrasonic sealing process means that poorly sealable paper composites can be processed without the loss of efficiency.

Bundles of Cigarette or RYO can be wrapped in paper to make products even more sustainable, and to further harmonise the packaging and the marketing and communication concepts behind it.

RESPONDING TO CHANGING PREFERENCES

Focke's dedicated R&D division for sustainable packaging aims to develop new packaging concepts to support the company's customers in the field of sustainability. Team members Jan Schnakenberg, Gerd Holtkamp and Christoph Schneider explained to TJI that regulatory environments and changing consumer preferences have caused a shift towards more sustainable packaging - including for tobacco products - and that manufacturers are adapting their products accordingly. Maintaining product quality is important, but marketing concepts and the communication of sustainability as an inherent quality of a product are equally important.

Jan Schnakenberg, project manager at Focke, commented that, "In general, consumers are becoming increasingly aware of the need for sustainable action. Those who can afford it also want to show that they are buying sustainable products."

He said that tobacco manufacturers - both large and small - are all concerned with the topic of sustainability and want to be prepared for possible changes in legislation. "Furthermore, achieving cost savings and increasing market share are always an imperative. When a product becomes more

sustainable, they also want to show this quality to the customer," Schnakenberg added.

How has Focke, as a maker of packaging machinery, responded to these shifts in the market? According to Gerd Holtkamp, design engineer in the R&D department and leader of the material laboratory, concerns relating to making tobacco packaging more sustainable are nothing new for the team at Focke. "In many cases, these concerns have been present for a long time," he explained. "For example, savings on materials, energy, minimising scrap, minimising production waste, and producing safe and relatively easy to operate machines that are flexible when it comes to processing different materials: all of these things existed before and they have now found their place under the heading of sustainability."

Today, however, sustainability for packaging materials has different meanings, depending on the various disposal routes and preferences of the different countries. "Sometimes the aim is to ensure that the packaging can be incinerated with as few pollutants as possible," Holtkamp

continued. "In other cases, it is important that all components of the packaging that are connected to each other consist of only one material, such as cellulose or polypropylene. Sometimes it is about biodegradability."

Christoph Schneider, head of packaging technology and senior design engineer in the R&D department, commented that Focke has always had a focus on paper and cardboard, and that technical developments within this group of materials has allowed the company to be more creative in their use.

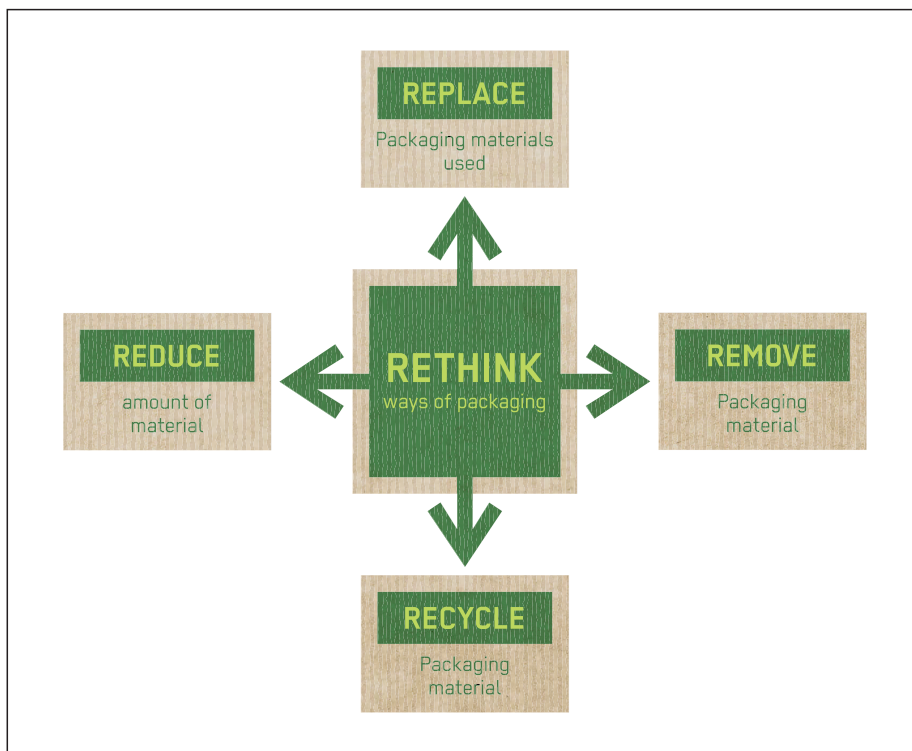
"Technical developments constantly lead to new possibilities in materials, production and processing possibilities," he explained. The company has retained the freedom to think laterally, and to seek out solutions that lie perhaps to the right or left of traditional solutions. We spend a lot of time talking to our customers and material manufacturers to find out where the journey can lead. As more and more attention is paid to reducing the amount of plastics in packaging, the use of paper-based solutions is a logical conclusion." ►



Sustainable box-in-box packaging



Sustainable RYO packaging



PUTTING SUSTAINABILITY INTO PRACTICE

So how do these paper-based solutions perform? Until recently, most sealed bundle film has been a composite film. Unlike when regular sealed bundle film is used, a paper solution produces no residual material when incinerated, and the packaging is both recyclable and biodegradable.

And what about the freshness of the product? Focke says that its tray packer (model 556) and sealed bundle wrapper (model 502) produce the most airtight sealed bundle on the market. According to Schnakenberg, the use of sustainable paper materials does not reduce the airtightness of a sealed wrap—which would not leak, or would only leak minimally, depending on the paper. “The water vapour barrier, which is sometimes requested by customers, is the bigger problem here because even the best papers have a comparatively poor barrier for this. For these customers, the use of a special cellophane film would then be an adequate substitute,” he explained; adding that customer requirements ultimately dictate the water vapour barrier

that is required and therefore which material will provide the most satisfactory result. When it comes to production speed and changeovers, the team said that the use of sustainable paper-based solutions does not present any disadvantages. “In principle, the production speed for all applications is the same with paper as with other materials, as long as the material properties are



Most airtight sealed bundle on the market

within a certain range,” Schnakenberg commented. “Paper has traditionally been a widely used material for packaging in the tobacco industry, and Focke has therefore always tried to design machines that are as open as possible for material changes. In many cases - for example, when changing from film to paper for wrapping, or the change from aluminium laminated paper to pure paper for the inner liner - only small and quickly-made changes are necessary.” The options that customers have installed on their production lines, and the design of the product that is being produced, ultimately dictate the speed of operations that can be achieved.

RETHINK, REPLACE, REMOVE, RECYCLE, AND REDUCE

The R&D division for sustainable packaging at Focke works according to the sustainability principles of the “5 Rs”, aiming to meet specific sustainability goals together with customers.

“Not all customers have the same ideas about sustainability,” Schneider said. “There is a great deal of room for interpretation, particularly in different markets, and we try to support our customers as best we can.” He continued: “Through many conversations with customers, we have ascertained that rethinking the packaging process is an initial and very important step. Can we replace, or remove certain materials completely - such as the foil - in order to make the packaging solution more sustainable? Perhaps we focus on making sure that the materials are recyclable, and work to reduce the overall amount of packaging and materials that are used - for example, even by using thinner materials. Seeing these aspects as individual parts of solutions, and being in a position to actively respond to them, is part of the rethinking process.”

Schnakenberg concurred: “In general, it is always the goal of Focke to be innovative, but also to respond to customer requests. We strive to continually present new ideas to our customers, and to inspire them to be successful through cooperation. Our best packaging ideas and machine solutions can only be successful together with our customers,” he concluded.

Jeremy Booth, in Leipzig