

ZAGREB

New modern offices



Office space at Hum na Sutli has become too cramped in recent years. This prompted the decision by Vetropack Straža d.d. in autumn 2022 to rent additional office accommodation in Zagreb so as to create new workstations. The office premises have enough space for about two dozen workstations, and they also include a meeting room with full technical equipment where workshops can be staged in the centre of Zagreb.

"The new office is also an opportunity for us to become more attractive as an employer to candidates who want to live in the urban areas around Zagreb, from where most of the Vetropack sites are easy to reach," according to Nuno Cunha, Chief HR Officer of the Vetropack Group.

TECHNICAL CUSTOMER SERVICE

Sensor locates danger points with maximum precision

What can fillers and bottlers in the food and beverage sector do when they have to combat glass splinters or even breakages in the filling line? In cases such as these, our customer service can now offer support with a new service and a sensor that measures precisely where glass containers are exposed to impact loads. In this way, we supply our customers with exactly the information they need to arrive at a fit-for-purpose solution to their problem.

Glass is a packaging material that offers many clear advantages. It is pollutant-free, it can be recycled, and it provides excellent protection for its contents. However, glass has one intrinsic disadvantage that cannot be overlooked: if you grip it too hard, it can break or splinter. This often presents a dilemma for bottlers and filling plant operators in the food and beverage industry: reduce the belt speed on the bottling line so as to protect the containers, but reduce the filling rate? Or: operate at a higher belt speed with the risk of losing products that have to be separated out? Michael Walzl, Technical Customer Service Manager at Vetropack points out: "Technical optimisations on the line can solve the problem – but before you start, you must know which changes have to be made and where they are needed." One Swiss food manufacturer – a Vetropack customer – recently had to confront these issues. Small splinters of glass were noticed on the line of one filling plant, but there was no obvious glass breakage. So where and why were the jars getting damaged?

To shed light on the matter, our customer service team used the new addition to our toolbox for the first time: the ShockQC in-line sensor from Masitek of Canada. It measures the forces and loads acting on a glass



container with maximum precision. As part of our service, we produced an exact replica of the glass container to be tested for our customer: in this case, a 390-ml European jar.



This dummy made of highly resilient plastic was fitted with a ShockQC sensor calibrated by the manufacturer. It then began its journey along the filling line together with a batch of other jars. A total of four tests were performed, each at different belt speeds. The dummy and sensor passed through the entire line, starting with unpacking of the jars all the way to the final conveyor belt that carries the jars away in their finished

cartons. The measured datasets were transmitted no less than 100,000 times per second to a tablet PC for visualisation on an easy-to-understand dashboard.

The result: the jars are conveyed along the line from the unpacking station to the filler and from the cooling tower to the cartoning and outbound transport stations at a rather leisurely pace, with sufficient minimum clearance. However, there is an impact zone between the filler and sealing station where the jars are subject to shocks that exceed Vetropack's guaranteed minimum impact strength by as much as 60 percent. This stress does not necessarily cause defects in a jar that has been processed without faults. But even if very minor faults or inclusions are present, an impact of this magnitude usually causes glass fragments to chip off. In this way, the cause of the problem was found and the basis for a targeted approach to eliminating it was established. Our customer is now able to optimise their filling line exactly where improvement is really needed. Michael Walzl is also satisfied: "Following on from the success of the first assignment, we have since used this service for several other interested parties – and we were able to provide rapid assistance every time. Now we're looking forward to helping the next customers optimise their lines – quickly and easily, with a results-oriented method that involves no unnecessary effort or expense."

3D PRINTING LABORATORY

Glass design you can feel

Thanks to the 3D printing service from Vetropack, customers as well as our own in-house staff can now experience the physical feel of new glass containers. The Vetropack Group has set up a 3D printing laboratory for glass models so that our customers can literally get to know glass packaging "hands-on" prior to series production. The prototypes, which are made from a special resin, precisely replicate the geometry of the containers to convey a sense of their look and feel.

Customers and internal stakeholders of the Vetropack Group have been able to take advantage of a new service since summer 2022. Mould Designer Christian Bruckner and his team are responsible for this innovation at our Pöchlarn site in Austria: "With the help of a 3D printer, we can produce realistic

3D models of new glass bottles and jars in small quantities. In fact, this isn't an entirely new service – we used to outsource it in the past. But the internal solution has given us far more flexibility."