

## Press Release

### **CorrBox Solution from Baumer hhs – A totally new approach to gluing and quality control in the production of corrugated packaging**

**Krefeld, 9 June 2022** – “Sustainable packaging regulations, zero-defect production, rising cost pressure, the increasing shortage of skilled workers, and the instability of global supply chains – a number of challenges affecting the industry right now prompted us to rethink adhesive application and monitoring in corrugated packaging production. We had several goals in mind, some of which initially seemed incompatible. The result of our efforts is the revolutionary CorrBox Solution system for flexo folder gluers (FFG). It boasts unprecedented performance and flexibility, and gives our customers significant advantages,” explains Andreas Schneiders, Corrugated Business Development Manager at Baumer hhs.

#### **Camera-like sensor**

For its CorrBox Solution, the company developed the PGD 1000, a sensor with camera-like properties that sets new standards in monitoring the gluing process. “Previously, adhesives were mixed with additives that fluoresce under UV light to appear blue, yellow, or green. The purpose of the additives was to create contrast between the surface of the packaging and the glue tracks so that cameras and sensors could detect the adhesive. In view of the wide variety of packaging surfaces – white, brown, printed – this task was always quite a challenge. The additives made the adhesives up to 50% more expensive, they were unacceptable under food safety laws in some cases and they limited purchasing options. The PGD 1000 eliminates all of these issues. The new sensor reliably detects adhesive on corrugated board without any fluorescing additives whatsoever. And it doesn’t matter if or how the surface of a substrate is printed,” explains Andreas Schneiders.

In short, the PGD 1000 gives corrugated converters the freedom to glue any kind packaging without having to worry about the monitoring process or the type of surface. What is more, they no longer have to decide between sensors or cameras for monitoring adhesive application.

Eliminating the need for fluorescing additives in the adhesives offers yet another advantage: Corrugated packaging producers can use a wider range of different adhesives. “Having a flexible choice of adhesives was one of our main goals in developing the CorrBox Solution. In view of the dramatic situation of global supply chains, our customers benefit even more from this kind of flexibility today,” points out Thomas Walther, Head of Business Development at Baumer hhs.

### **Unique new multi-application head**

Similarly, the company has set another milestone in the market with its new multi-application head for the CorrBox Solution. It is based on the innovative technology behind the Baumer hhs PX 1000 cold glue applicator, which is significantly more tolerant of viscosity fluctuations thanks to a newly designed electromagnetic drive that achieves a 42% higher closing force (compared to the PL-500 predecessor model). The new multi-application head guarantees premium gluing results even at the limits of the viscosity range, without requiring complex parameter settings.

The PX 1000 module for the multi-application head opens and closes considerably faster than all other comparable heads with electromagnetic drive. With its high closing force, even adhesives that have thickened after long idle periods can be reliably dispensed. The nozzles on the multi-application head can be lowered into an optional water bath that effectively prevents them from drying out, even over extended periods, and eliminates any contamination or residue build-up. The PX 1000 multi-application head displays excellent start-up behaviour as a result.

### **50% less time and effort for cleaning**

“Customers are starting to report that the multi-application head doubles the duration of uninterrupted production between two cleaning cycles. In other words, it cuts cleaning in half. The risk of gluing errors is reduced to the same extent. Another advantage is the up to 60% reduction in glue consumption,” says Thomas Walther, describing the positive response to the new head in practice. Baumer hhs has made these significant savings possible by using an optimised stitching algorithm that works hand-in-hand with the speed of the PX 1000 application head. With this method, the continuous line of glue applied previously is divided into a series of short segments without any tailing whatsoever. It results in significant savings on adhesive, and even increased adhesive strength in many cases. And not least, reduced glue consumption also enhances the sustainability of a packaging product.

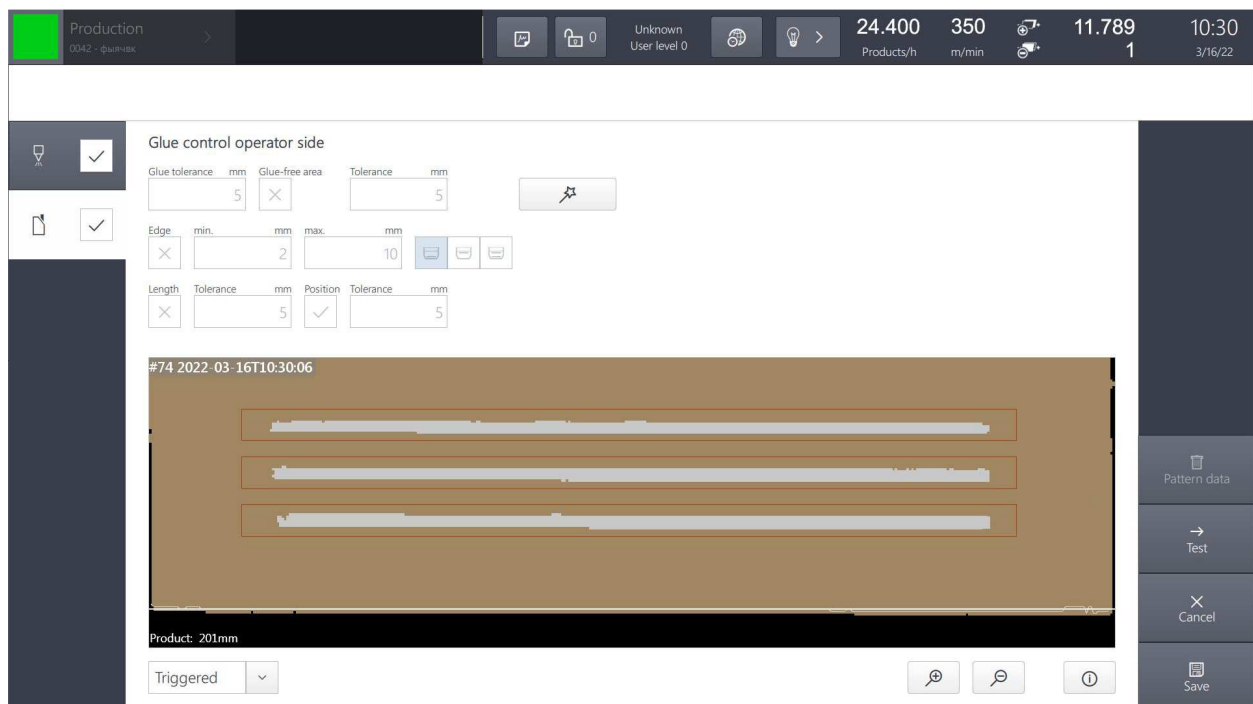
### **Simple operation**

No matter what equipment is introduced to the market today for a given packaging application, it must take the shortage of skilled workers into account. The CorrBox Solution is operated and set up using the Xtend<sup>3</sup> controller from Baumer hhs. “Xtend<sup>3</sup> is known for its unique, intuitive, menu-driven interface. We’ve optimised the user interface of our CorrBox Solution to meet the specific needs of the corrugated industry,” notes Mr. Schneiders. Parameters can be set and predefined on different levels. Settings that have to be entered only once by an expert are clearly separated from parameters entered by machine operators, the number of which has been reduced to a minimum. In addition, many parameters can be stored in the controller and easily adapted by an operator using simple plus/minus keys. With these features, the Xtend<sup>3</sup> also supports very short setup times. For repeat orders, saved settings can even be retrieved at the push of a button.

In combination with the PGD 1000 sensor, the Xtend<sup>3</sup> gives corrugated converters access to new possibilities and functions. Another highlight: With this sensor, machine operators can follow the gluing process live, in real time on the screen of the Xtend<sup>3</sup> controller – something that was only possible before with a camera system. The list of new functions also includes edge detection. In this case, the PGD 1000 checks the inside and outside glue lines towards the outer edge to reliably prevent inside gluing – and further increase the reliability of the overall production process.

The CorrBox Solution is of modular design. Customers can choose from various models, a number of different control and monitoring functions, as well as optional software features. Thanks to its open architecture, the system can grow along with the needs of customers long term, meaning it offers them future-proof equipment and the assurance of a secure investment.

Baumer hhs has consistently made pioneering achievements in the field of industrial gluing and quality assurance by questioning established methods and developing totally novel solutions. Once again, the company has lived up to this tradition with its CorrBox Solution for corrugated converters.



The CorrBox Solution is operated and set up using the Xtend<sup>3</sup> controller from Baumer hhs, which is known in the market for its unique, intuitive menu navigation via touchscreen. The user interface has been optimised to meet the specific needs of the corrugated industry. It includes a visual display of the results of glue control.



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**Baumer hhs GmbH**

Baumer hhs GmbH, Krefeld/Germany, is a leading, internationally operating manufacturer of industrial gluing systems in conjunction with quality assurance and camera verification systems. Baumer hhs offers its customers a carefully coordinated portfolio of solutions for a host of different demands on cold glue and hot melt application in automated production environments, including application heads, pumps, pressure vessels, control and monitoring systems. The portfolio is rounded off by a comprehensive range of services, from consulting and the testing of innovative applications at the hhs solution centre in Krefeld, all the way to every form of after-sales service.

Solutions from Baumer hhs are used in the folding carton and corrugated board industry, in print finishing, special-purpose machines and many other applications.

For more information on the Baumer hhs company, its products and its services, go to: [www.baumerhhs.com](http://www.baumerhhs.com).