

Turbox puts Köster in pole position



When Tornesch, Germany based Köster Kartonagenfabrik GmbH & Co KG looked to expand their gluing capabilities, they made the bold move to become the first owner in the world of Bahmüller's new speciality gluer. An exclusive report by Daniel Brunton.

Based about 40km north east of Hamburg in northern Germany, Köster Kartonagenfabrik GmbH & Co KG is a privately owned company that operates two sheet plants. Established as a solid board converter in 1868, the company moved exclusively into corrugated in 1975. The company, which employs 100 people between the two sites, specialises in offering dedicated trade die-cutting and speciality gluing services. "About 75 per cent of our production is for the trade," explains Gerhard Danowsky, General Manager at the Tornesch site. "We undertake work for boxmakers throughout Germany and even do work for companies as far afield as Holland, Poland, Denmark and the UK."

Mr Danowsky and the owners of Köster are great believers in training young people to work effectively in the

corrugated industry and have been recognised by local government for the hard work they do in recruiting and training young people. "We believe in thorough training of our staff, and we have an active Apprentice training scheme to give young people a good grounding and understanding of the corrugated industry," explains Mr Danowsky. "With this in mind, we are very similar to Bahmüller, who also operate dedicated Apprentice training schemes. It is this belief in young people that made us realise that the supplier we have chosen thinks like us and are keen supporters of training the next generation of German manufacturers."



L to R: Ulrich Wolz (Bahmüller), Gerhard Danowsky and Doeke Holtrop (JDengineers).

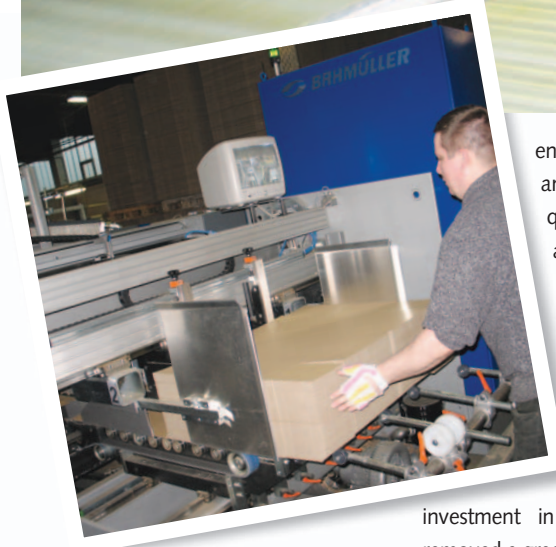
The Tornesch site has been well invested over the years. Their comprehensive die-cutting facilities include: a Bobst SPO 1600 flat bed die-cutter equipped with Roda FPK 1600 pre-feeder and Bobst Easybreak system; a Bobst SPO 1575 flat bed die-cutter and an IMG Klett Cobra A120-162, that was installed in late 2003. Printing is undertaken on a 3-colour printer slotter.

The company is particularly well known for its high quality, speciality

GmbH.

"A couple of years ago, we looked at ways in which we could really improve our productivity, but without investing in additional capital machinery," recounts Mr Danowsky. "After a great deal of planning and research, we made the decision to automate our materials handling. We opted for a complete Dücker Fordertechnik GmbH roller conveyor system, complete with automatic transfer cars. This system

the world, he had no doubts about the decision to invest. "We got to know Bahmüller a few years ago, because we were very interested in the BoxflowPacker, a system that fits behind a speciality gluer. When we then got to know them a little better, they told us about their plans to develop a new speciality gluer and we told them that we were interested to see the drawings. Following several presentations and thorough evaluation of other gluers in the



gluing. Work is undertaken on no fewer than three gluers (including a Domino 165 Matic and an Alpina 145 Matic) and the latest addition to the operation, the Turbox speciality gluer from Pluderhausen, Germany based Bahmüller

ensures that stacks of board are moved around the plant quickly and efficiently. We also opted to fit the high out-put SPO 1600 with a pre-feeder and separator. This has helped the operators ensure that it is running at maximum capacity. In terms of Health & Safety, the investment in materials handling has removed a great deal of fork-lift and hand moving of board, which is great for our operators."

A market first

Mr Danowsky is quick to point out that even though this is the very first Turbox in

market, we decided that the new Turbox, in-line with a BoxflowPacker was the solution we were looking for to enhance our gluing capacity."

Installed during the first few weeks of December 2006, the Turbox is a fully servo driven machine and is the result of a development partnership between Bahmüller and JDengineers from the Netherlands. Features of the machine include short set-up, maximum running speed, process reliability, innovative quality control and a modular layout.

In 2005, Bahmüller reacted to market demand and developed the Boxflow® Packer to boost the output of folder gluers, ensuring maximum running speed. Now they are marketing their own range of speciality folder gluers, tailored to the Boxflow® Packer. Right from the start,

the main development focus was to reduce set-up times and to increase up time of the gluer. Its modular design, with separate servo drives, means that the machine is not standard — it can be configured to individual plant requirements. Available in a range of sizes from 1450-2800mm, the Turbox 1700 has a maximum speed of 33,000 kicks/hour.

The Boxflow®Packer ensures highest productivity, with fully automatic batch building and strapping of the boxes up to the maximum production speed of the Turbox. The result is an effective increase in gluer performance due to high production speeds.

All control systems for the Turbox and Boxflow® Packer are integrated in Boxflow®Control, reducing set-up times considerably. Further features that reflect a high level of automation are the touch screen display with graphic user interface, modem connection and integrated glue control system. External equipment, such as quality control systems, can also be integrated at any time. With easy access to the individual modules, set-up is effortless. The exchange of folding and transport belts is possible without removing drive shafts.

Boxflow®Control acts as the interface between man and machine. Via touch screen, data can be entered simply and machine functions operated easily. Also available is a cordless radio controlled operating unit which can be used to control the main machine functions from any position.

The quality control system, which is not just a glue control system, also checks for accurate folding, storing information in the main computer. A printout can be produced for customer purposes. Part of the control concept is an integrated diagnostic system. It records and processes information necessary for maintenance and servicing. Fault readout and fault diagnostics are stored automatically in the central computer and operator panels of the gluer. The machine is also equipped with a modem for remote diagnostics — with direct contact to the Bahmüller service team, resulting in less



Roda prefeeder to the SP1600.

routine service visits. As an option, all production and machine data can be easily transferred to the customer's production data acquisition system.

With the Boxflow®Control logic, the machine set-up is automatically calculated and accurately set-up after entering the blank data — ensuring high product quality. All optimised adjustments for all orders are stored and can be activated at any time, reducing the operator's work load and leaving him free to concentrate on fine adjustment. This applies to even the most complex box layouts — such as 4-corner or 6-corner boxes — including the positioning of servo-driven back folding hooks. All optimised data is stored in the main computer once the job is complete.

Additional control systems can be integrated in the various modules of the Turbox — such as glue application control, RFID and code reading — making this one of the most efficient, accurate and productive speciality gluers available.

"We are proud that Köster has had faith in us and we believe that a great partnership has evolved between us," comments Ulrich Wolz, Sales Director of Bahmüller. "We are working closely with Köster during the first few months of installation so that we can learn from them how they feel the machine can be optimised. I'm delighted to also report that following the Open House where we presented the machine that is now

running in Tornesch, we have received three further orders from companies in Europe and those machines will be installed over the coming weeks and months."

"The Turbox is the latest in world class machinery being developed in Europe," comments Hans-Jürgen Bahmüller, Chief Executive Officer of the company. "We are delighted with the market's reaction to this exciting new machine and we are now planning the next product developments to further enhance the capability of our BoxFlow solutions. Our aim is to become one of the leading suppliers of complete speciality gluing production lines," he concludes.

