



HIGH OUTPUT AND TOP QUALITY WITH
THE NEW JD TANABE BOXR

THE BOXR

IS LATEST SPECIALITY GLUER

Tanabe, JD Engineers and Alliance, well-established companies in the corrugated industry, have developed a new speciality gluer — a machine with high output and accuracy and at the same time, more functionality through improved servo controls from JD, combined with the well-known sturdy mechanical design of Tanabe.

Tanabe, JD Engineers and Alliance decided last year that the market would be best served with a new generation speciality folder gluer, based on a combination of each other's expertise in folding and gluing. Listening carefully to their customers, the new system focused on three areas — higher output, better quality and more functions. “The new speciality

folder gluer is called the BoxR – a play on ‘the strongest fighter in its market’,” comments Erik Boom, Managing Director of AMSE.

“For a new development you always need a strong foundation,” Mr Boom continues. “All three companies agreed immediately that the sturdy mechanical design from Tanabe would be the best basis for the new BoxR, as their machines have proven to be rigid and reliable over many years. All new units of the BoxR will again have the heavy 25mm strong side frames, guaranteeing life-time stability and accuracy. The cross members and shafts are the same as in the current Millennium machine. Also, the open structure and easy accessibility from the present Millenium has been maintained. In



the new design, this has even improved. Some cross members are removed and each unit gets an extra step for easy access. The safety light curtain on the operator side has been replaced by safety photocells between each unit. The units are also equipped with LED lights to show the status of each unit. If, for instance, a certain unit has a problem, the light from this unit will turn red. In a blink, the operator sees where intervention is needed. If everything is running fine, all LEDs are green.”

Doeke Holtrop of JD Engineers, discusses the control systems. “JD took on the new control architecture on the BoxR. We have many years of experience in this field as we have developed and sold these controls as upgrades on old Tanabe’s and other gluers. The new control system makes life easy for the operator. It is completely visualised, all settings being shown in pictures. Servo technology is a major change to the Millenium. By replacing the main drive shaft with servo drives, the new BoxR gained even higher accuracy, more flexibility and quality. On top of that, the number of rejected boxes can

be reduced by 70 per cent. If a fault occurs, the affected unit will stop, but all downstream boxes will continue to be turned into a folded box, thus increasing the output.” Mr Holtrop continues, “Each unit has its own electrical cabinet and is connected with the next unit by only two cables — one power cable and one Ethernet cable for communication. You can imagine that this decreases the installation time of the new BoxR. In addition, the modular design of the BoxR makes it much easier to change or expand the line.”

The BoxR has three standard 19” touch screens. On each screen, the operator can control the whole line. More touch screens can be added if needed, even on the drive side. The BoxR is a fully auto set-up speciality folder gluer.



Once a new order has been entered into the system, it can be retrieved the next time as a repeat order. All settings are stored in the computer, including all pneumatic pressures. To set all axis to the exact same position for a repeat order, the BoxR is equipped with a linear measuring system which has an accuracy of $\pm 0.02\text{mm}$.

Another novelty of the BoxR is the JD Special fold. This is a system that replaces the standard front fold hooks to fold the front flap. This JD Special fold is a servo rotary device to fold the front flap. “This servo drive is more accurate than the standard hooks and will not destroy your boxes if it contains holes,” explains Mr Holtrop. “The BoxR benefits from e-technology in that it is equipped with JDIS, an online service to allow our engineers to access the machine on-line. The big benefit to the customer is online fault resolving, remote I/O check and help with new orders.”

Mr Boom concludes, “The BoxR is the next generation speciality folder gluer with higher output, better quality and more functions. At a recent open house at Tanabe’s Ibaraki factory in Japan, we presented the new machine for the first time and received some really encouraging feedback from visitors. It will be available for the European market in the second half of this year.”

About the partners

Tanabe, established in 1947 in Japan, made its first folder gluer for RSC boxes in 1971. Six years later, they started to export their gluers around the world — the US was the first overseas market for them. In 1981, Tanabe developed the first folder gluer with a computer controlled system. Around the

same time, they established the Ibaraki factory, which is where they still build their folder gluers to this day. In 1991, Tanabe launched the Millennium speciality gluer. To date, the company has sold more than 2000 gluers worldwide; most recently they acquired Sugano so it can now supply smaller models. Tanabe's range of machines can handle boxes from 450mm up to 2800mm wide.

JD Engineers B.V. was founded in 1999 by Jasper Kruizinga and Doeke Holtrop. The company employs 29 people, offering a wide range of service and controls innovations on equipment supplied by Tanabe, Marumatsu, Umetani and many others. The solutions offered by JD Engineers range from specific parts right through to computer-controlled, high-speed, Servo systems. All components and software installations are carried



out by JD Engineers, providing a customised solution. Over the last six years, JD Engineers have installed 264 upgrades on folder gluers in Europe, Eastern Europe (Latvia, Lithuania, and Russia), USA, Mexico, and Australia.

Alliance was established in 1972 under the name Serco BV. Serco made splicers, glue kitchens and materials handling systems. In 2000, the US Company AMSI took

a majority in Serco and Pallmac. Together they formed Alliance Machine Systems Europe BV. At that time, Alliance also produced stackers, feeders, breakers, palletisers and different kinds of materials handling systems as well as the speciality folder gluers from J&L. Recently, the 10,000th system was installed. In 2005, Alliance became the distributor for Tanabe. ■

JDengineers

JD Engineers BV
 Jetze Veldstraweg 109
 8515 CP Oldeouwer
 The Netherlands
 Tel. : +31(0) 513 552 125
 Fax : +31(0) 513 552 202
 E-mail : info@jdengineers.nl
 Website : www.jdengineers.nl

**Your partner for
 Service, Spare Parts,
 and innovative solutions for
 your speciality folder gluers**

