FLEXIBLE IN AUTOMATION

Demaurex is an innovator and leader in flexible automation with parallel axis robotics technology. Abigail Saltmarsh reports on the company, which is part of the Bosch group.

In the 25 years of its existence, Switzerland-based Demaurex has grown quickly in robotic applications. Today, the company, which is part of the Bosch group, is an innovator and leader in flexible automation using parallel axis robotics technology.

This, according to product manager Dragan Dragojlovic, is due to the company’s long experience in the business, which puts it several steps ahead of its competitors in innovative flexible automation solutions for the packaging industry.

“The main difference between us and other robotics manufacturers in the same field is the 20 years’ experience we have in Delta robot technologies,” he said. “We shared a patent with ABB for this technology but that came to an end last year.”

A unique robot

Demaurex was founded in 1983 by Marc-Olivier Demaurex, as a company specialising in flexible automation solutions. In 1988, it began development of the Delta robot under the licence of the Swiss Federal Institute of Technology of Lausanne (EPFL).

By 1992, the company had sold its first Delta robot packaging application to Roland, where the first application was a landmark installation of Delta robots loading pretzels into blister trays. From then on, the successes followed, and in 1996 the company sold its first vision-guided Delta robot installation to Nestlé – a chocolate assortments packing line of seven robots, installed in Switzerland.

Today, Demaurex has 80 employees and an annual turnover of CHF22 million.

Soon Demaurex began to focus on the packaging industry. It joined the SIG Group to link Delta robot technology with the other packaging technologies of the SIG group and developed a standard machine strategy, developing standard products focused on bringing flexible automation to even low-end producers. The result of this development was its top loading and feed placing products.

In 2004, the Bosch Group purchased the SIG Pack division from the SIG Group and Demaurex was incorporated into the Packaging Technology division of Bosch.
Established in 1976, Matrox Imaging is a leading provider of component-level solutions to OEMs and integrators involved in the machine vision, image analysis, medical diagnostic and video surveillance industries. Products include frame grabbers, vision processors, smart cameras, and embedded imaging systems – all of which are supported with the Matrox Imaging Library, the field-proven and device-independent development software. Headquartered in Montreal, Quebec, Canada, Matrox is a privately held company with offices in the United Kingdom, Ireland, Germany, and Hong Kong. For more company information, visit: www.matroximaging.com.
The Astror is an assortment packer with vision-guided high-speed Delta robot 506. It can handle up to 140 assortment packs per minute and again, product changeover can take place in five minutes with an inexpensive changeover of parts.

Whole production line
Following a rigorous selection process, the La Normandise Company, in Vire (Normandy, France), commissioned Demasure to design and build a fully automated packaging line for cut-fried. The main factors taken into account were the high rate of production, flexibility in transferring from one type of production to another and the price per performance ratio of the system. The objective was to load either a flow-wrap machine, to produce a 100g Doypack stand-up pouch, or a twin Paloma feed placer for the filling of top-load cartons in various sizes. The whole production line, which includes a flow-wrap machine, carton erecting machine and carton sealing machine, is new and fulfils the requirements of the growing demand for these products.

The production rate is 440 products per minute for both versions. For this application, two-pack placer cells of the Astror type were set up.

A strong position
Demand is high for all machines, said Mr Titterton, and changes are taking place. "At the moment, for example, Renault is seeing strong demand for the Astror, while in France it is the Paloma and Delfi," he said. "We serve the whole of Europe from our base here in Switzerland and we expect to see strong growth. Our strategy now is to grow in different markets, such as the UK and Germany, for example."

He added: "As costs of labour go up, and more and more people turn away from repetitive jobs, automation will become increasingly popular. The challenges we have ahead of us are increasing our sales, and making our customers aware of the advantages of automation while also ensuring that they have realistic expectations."

INTEGRATED SOLUTIONS

Delivering integrated and fully automated packaging systems looks set to be the key to future success for the German machine manufacturer, the ZAHORANSKY Group, as it strives to become a one-stop shop for its customers. Claire Milner-Smith reports.

More than a century ago, Anton Zahoransky started making simple tools and machinery to manufacture brushes. Today, with the third generation of the Zahoransky family at the helm of the operation, the company has become one of the leading manufacturers of brush-making machinery and equipment in every shape and size. In addition, it also manufactures injection moulds, blister packaging machines and handling systems.

Founded in the Todtnau region of the Black Forest in Germany in 1902, the ZAHORANSKY Group started out making brush machinery but moved into injection mould manufacturing following the development of new plastic technologies. Over the past century, its name has become synonymous with reliability and precision and sophisticated technologies. This year it fully expects to top the €45 million turnover generated in 2007 by increasing sales to more than €70 million.

Make way for BAT10
Its delivery of packaging technology combines high performance machines with a complete service programme. ZAHORANSKY has been active in the packaging machine sector for more than a quarter of a century, and its systems can be easily adapted and modified to meet the requirements of today's markets and, just as importantly, the needs of the markets as they evolve over time.

One of the latest success stories at ZAHORANSKY, which has been hailed as one of the most significant innovations in the history of the company's packaging division at least, is the development of the BAT10 blister packaging machine. ZAHORANSKY launched this highly efficient and high output machine that is capable of up to 400 packages a minute at the Enterprise exhibition in Todtnau, Germany, earlier this year. It's a much bigger and faster machine than any other ZAHORANSKY machine, and its modular design allows ZAHORANSKY to fulfil customers' needs for different-sized systems according to their specific requirements. Its delivery of associated systems, which work in conjunction with the machine, means it is also an automatic handling system with no need for operators to place the product as before. "The BAT10 has received a great response from customers: it's the machine the market has been looking for," added ZAHORANSKY's MD, Ulrich Zahoransky.

ZAHORANSKY's competitive edge lies in its expertise at developing, designing and building machines that have a quick change-over time, achieve a high output and are built on the successful modular system. The benefits of the modular system are that ZAHORANSKY can construct a machine that meets the exact requirements of a customer not only at this moment in time but also modify the machine as and when necessary. "It's much more cost effective and great for our customers because it is possible to expand that one machine and add extra features later," confirmed Mr Zahoransky.

The BAT10 machine follows hot on the heels of the B4 and B16 Series: an automatic blister packaging machine that is simple, economically priced and also achieves a high output. It is suitable for packaging toothbrushes, combs, writing instruments and all kinds of items of similar size. The B4 is for PVC and PET blister foil with a maximum forming area of 144 X 299mm. The B4 is fitted with a forming station, sealing station and punching out station which all work inline fully automatically.>