CASE STUDY

Contract Packaging 3.0

The amount of typical co-packing offered is almost negligible. In most cases it is actually limited to the usual manual or semi-automatic packaging. ESTB GmbH offers a complex service instead of classical contract packaging. The company uses efficient semi-automatic packaging systems to implement flexible packaging processes.

The Iserlohn-based ESTB GmbH was founded a decade ago as a pure contract packager. Back then, simple packaging and installation assignments were the bread and butter of their day-to-day business.

Complex Service

Today the share of simple contract packaging operations accounts for less than five per cent of overall production time. The company has now diversified and developed into a comprehensive system provider for well-known lighting and sanitaryware clients.

A particular strength of these packagers from South Westphalia resides in their managing of complete product groups. This includes the entire C-level management process: supplier selection, the procurement, disposal and warehousing of purchased parts; installation and manufacture of products on in-house machines and shipment to end customers. Clients no longer need to be burdened with these tasks and can concentrate on core competencies. However, the company, whose staff numbers have since risen to 140 employees, has paid particular attention to mechanical support and the automation of production processes organised as a stand-alone operation. Consequently, they sought more efficient and more flexible solutions in the product packaging area.

Semi-Automatic Packaging Solution

Semi-automatic packaging solutions were to replace the former manual packaging process. ESTB Managing Director Sönke Kühl explains: 'Quite a lot of tasks were previously outsourced and performed in a home-working environment. Logistically that was costly and time consuming. We barely had any transparency as far as comprehensive stock overview was concerned.' Since Iserlohn workshop employees also work in the packaging area, the packaging systems had to be easy to operate and safe when in operation. Based on their own experiences at other companies, ESTB managers chose Automated Packaging Systems (APS). APS employees investigated the current packaging process and developed solution proposals for the use of semi-automatic packaging systems jointly with ESTB managers. This led to the use of the first APS packaging system in 2013. A short time later, increasing packaging volumes resulted in the purchase of an additional packaging
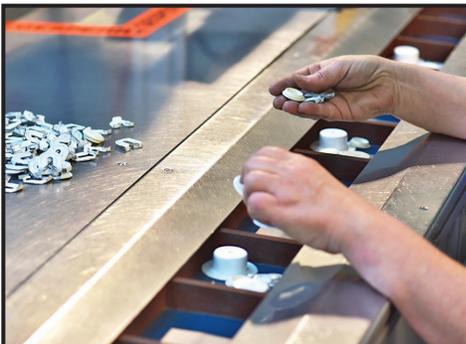
Company Name
ESTB GmbH

Equipment Used
Autobag® AB 180™
Autobag® PS 125™ OneStep™

Materials Used
Autobag® Bags-on-a-Roll

system and a tabletop packaging system from the same provider. 'We were impressed by the performance and packaging speed of the Autobag® machine,' says Sönke Kühl. 'The machines can cope with the flexibility we require with frequent product changes without long periods of downtime.'

The bagging machines were combined into a packaging island. This is the destination point for items requiring packaging along with the accessories ESTB provides. They go through a semi-automatic packaging process and then pouch-packed items are forwarded using an intralogistics solution.

Pouch Printing Included

The AB 180™ Autobag packaging system featuring a thermal transfer printer combined with a Maximizer product feeding system is one of the machines used in Iserlohn. The feeding system takes the product sets, comprising up to 20 accessory items laid out by the operator, to the AB 180 bagger. Simultaneously, the feeding belt checks the number of items to be packaged per pouch. Based on the customer's order, the bagger uses an automated process to print labels and item data onto the packing pouches, fill the pouches with product sets, seal and send them off. The system can pack up to 80 pouches per minute. An integrated touchscreen is used not only for operating the printing and packaging device, but also for managing and coordinating all help, diagnostic, data processing and system monitoring functions. An operator can change the pouch format in less than two minutes. And finally, an integrated diagnostic tool, in conjunction with the replace-n-repair module, ensures a high level of system availability.

In addition, an automatic control scale was integrated into one of the packaging systems to package pouches based on target measurements for customer orders.

The PS 125™ OneStep™ tabletop bagger, ordered for packaging smaller production volumes, is also a print-pack combination. The machine, which only weighs 37 kg, can pack up to 25 pouches per minute in continuous mode and only requires 56 x 48 cm of installation area. By using the PS 125 OneStep, pouches, which are 50–265 mm wide and 100–450 mm long, can be filled by hand. A simple Push-to-Seal™ mode or the optional foot switch automatically seals and indexes them. The tabletop device is equipped with an integrated PH 412 thermal transfer printer for printing directly on pouches. Barcodes, logos, free text or running serial or check numbers can be printed with a resolution of up to 200 dpi.

Data Interface

Like the machines themselves, all the thermal transfer printers used in the APS packaging systems have both separate USB ports and parallel and serial ports. This makes it possible to connect an external PC, notebook or proprietary IT system port to transmit data. The machines can even be fully integrated into available production processes. Jan Fischer, the company's technology head, explains: 'At the moment we have packaging data right on the machine. But we also have a very high performance ERP system at our company. Therefore, in the future, we intend to incorporate the baggers into our ERP system.'

The Iserlohn teams currently package several million pouches per year and the trend is growing. Managing Director Sönke Kühl sums it up: 'So far we are satisfied with the APS machines and service. If demand for our system services continues to grow, of course we will also request additional packaging technology stock.'

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