

CASE STORY

Packaging

Bobst Competence Center Mex, Switzerland

The company BOBST and Hunkeler Systeme AG have worked together for more than 15 years now. Globally, over 300 customers operate with systems from BOBST and Hunkeler Systeme AG.

Packaging printer who invest in a die cutting or a foil embossing machine from BOBST, frequently choose disposal technology from Hunkeler Systeme AG. They want to optimally utilise the productivity of their BOBST machines and, at the end of the production process, want a disposal system with recognised reliability. About 15 years ago, this partnership became more 'official' when BOBST and Hunkeler Systeme AG agreed to work together more closely. Since then, the two Swiss companies have installed systems and plants worldwide for over 300 customers active in the folded box, corrugated cardboard and hot foil embossing sectors. This collaboration has also meant that new processes could be developed. Hunkeler Systeme AG can offer the corrugated cardboard sector a de-dusting system, specially designed for the requirements of the flexographic printing and converting series from BOBST.

Hunkeler Systeme AG equips the BOBST Competence Center in Mex

A real milestone in the partnership was laid in 2012. At that time, BOBST opened their new Competence Center in Mex, the headquarters of the company. Here is where BOBST customers have the opportunity to test the die cutting and embossing technology on their own products. Hunkeler Systeme AG supplied the suction, shredding and compaction equipment for the Competence Center. At the moment, four die cutting and three

foil embossing machines are connected to the system, whereby the two systems run independently of one another.

Testament to close collaboration

An excellent testament to intensive development collaboration is the disposal equipment which BOBST utilises for the foil embossing machines of the series VISIONFOIL, EXPERTFOIL and MASTERFOIL. The core of the system is suction. This is integrated into the machines and connected to the shredding and compaction equipment via ducting. The challenge faced by Hunkeler Systeme AG's engineers was to efficiently remove the lightweight foil material, which can reach production speeds of up to 8,000 sheets an hour. As if this were not enough, the precise register accuracy in the



For the disposal of production waste from BOBST's foil embossing machines, Hunkeler Systeme AG developed a tailor-made suction technology.



Currently, at the BOBST Competence Center in Mex, four die cutting machines are connected to a disposal system.

foil embossing process could not be impaired. Additionally, the fine dust particles caused by the transport of foil waste and its shredding had to be entirely removed from the air. This requirement was fulfilled by the configuration of the suction system: Hunkeler Systeme AG placed the fan at the end of the system, which creates a vacuum. Compared to a positive pressure system, the dust-laden air cannot escape through unsealed parts of the ducting system into the ambient air. Additionally, the great efficiency of the jet filter technology stays at a constant level, thanks to a self-cleaning function. An anti-static unit ensures the smooth transport of the foils.

In their Competence Center in Mex BOBST has re-organised a large part of the machine programming for folded box production and corrugated cardboard processing. Die-cutting machines of differing series are now connected to modern suction equipment from Hunkeler Systeme AG. The device removes the waste within the stripping station directly following the die-cutting process as well as the skeletons after depanelization. The die-cutting

waste is separated from the transport air with a rotary separator and sent to a press container. The air itself is cleaned from the dust in a filter system and released into the production area.

A measuring system in the press container sends an SMS to the transport company as soon as a defined fill level has been reached.

Energy Saving System and Automatic Switch-off

The suction plant has been designed for the most economical operation. At maximum performance, the system transports 24,000 cubic metres of air an hour. Machine performance is automatically adapted to the current requirements. An Energy Saving System (ESS) regulates the energy consumption of the plant according to need and allows only as much electrical output as production requires. Compared to operation without ESS, the consumption of electrical energy sinks by up to 60 percent. If none of the machines are in operation, the automatic switch-off puts the fan idle state.



The suction plant in the BOBST Competence Center operates with an air volume flow of 24,000 cubic metres an hour.



Serge Kalbfuss, Competence Center Manager BOBST, Mex

Serge Kalbfuss is the manager of the BOBST company Competence Center in Mex. We spoke with him about the company's collaboration with Hunkeler Systeme AG.

Mr Kalbfuss, how did the collaboration between BOBST and Hunkeler Systeme AG come about?

Process-related production waste from the BOBST machines is something that we must efficiently dispose of. In the packaging industry, BOBST enjoys a high reputation due to quality and reliability, which is why we want to work in the disposal sector with partners who can meet the high expectations of our customers. We have found just such a partner with Hunkeler Systeme AG.

Which criteria are important when the BOBST company is looking for a partner?

The packaging industry is a very demanding and dynamic sector. The market expects that we react rapidly to new requirements and develop appropriate technology quickly. And it is exactly this that we expect from our partners. Flexibility, availability and the ability to be innovative are thus central criteria which have a great influence on our decision.

This collaboration has continued now for more than 15 years. What do you especially appreciate about Hunkeler Systeme AG?

Hunkeler Systeme AG stands out with their very agile, competent development team. The engineers are well able to adapt new components to the stamping and hot embossing film machines used by BOBST, even when our machine builders, at the time of original construction, could not conceive of such additional devices. This engineering competence was especially notable when it became necessary to develop suction devices for our hot embossing film machines. And enormously valuable is also the good team work between our development department and that of Hunkeler Systeme AG. The exchange of information has helped to find appropriate solutions whenever new tasks have appeared.