



Disposal solution for the mail-order business

Channelled flow of cardboard

Carpenters, forestry workers or road construction workers looking for hard-wearing but modern work clothes come to the right address at engelbert strauss. This family-owned business in Biebergemünd now belongs to Europe's leading mail-order companies for work clothes. They deal with countless customer orders and deliveries, as well as a flow of cardboard into the company. To manage this, the mail-order company is using two fully automatic HSM channel baling presses with great success.

Customer quote:

"Without the two HSM channel baling presses we wouldn't be able to dispose of the growing volume of boxes at economically acceptable prices"

Steffen Strauß, Managing Director of engelbert strauss in Biebergemünd

Few would suspect one of the greatest success stories in the regional economy of Hesse to be in the town of Biebergemünd at the foot of the Spessart hills with around 8,000 inhabitants. Nevertheless, engelbert strauss can proudly claim to have risen to one of Europe's leading providers of work clothes and occupational protection. Whenever tradesmen, car mechanics, toolmakers, construction and forestry workers, carpenters, joiners or gardeners want to order hard-wearing trousers, jackets, gloves or safety shoes by internet or phone – the company with the perky ostrich as its logo can deliver the required article promptly.

Successful specialised mail-order company

The main catalogue comes out twice a year and contains around 1,000 pages with 20,000 articles, including a range of supplementary products, such as hammers, paint brushes, foils, adhesive tapes, ladders and office materials. The logistics centre at the

entrance to the town of Biebergemünd has now grown to 25,000 square metres and it is on course to grow even more in the near future. "We are always looking for skilled staff," says Steffen Strauß, managing partner of the company.

Rising flow of boxes

The success of the mail-order company from Hesse can also be seen in other areas, namely the rising amount of cardboard. Whether it's work trousers and jackets, shoes, shirts or T-shirts: most textiles arrive on the premises in standard 400 x 600 x 300 millimetre boxes. "We store between 2,000 and 4,000 boxes every day," says Steffen Strauß. As soon as the work clothes have been dispatched, huge amounts of empty boxes remain behind. To dispose of these efficiently, the company installed the first fully automatic VK4012 channel baling press from HSM in 2008. HSM, the manufacturer from Frickingen in Baden, is one of the leading specialists in disposal technologies.



The Facts

Company

engelbert strauss GmbH & Co. KG in Biebergemünd is Europe's leading mail-order company for work clothes and occupational protection. The family-owned business develops practical products for trade, industry and services with a worldwide network of manufacturers, designers and technicians. The range includes 20,000 articles. Staff: approx. 600

Task

At engelbert strauss, between 2,000 and 4,000 standard 400 x 600 x 300 mm boxes full of work trousers and jackets, shirts, gloves and safety shoes are stored every day. A maximum of 800 boxes need to be disposed of every hour.

Solution

To compress and dispose of this amount of cardboard every day, engelbert strauss uses two fully automatic VK4012 channel baling presses from HSM. Depending on the size, the presses convert between 100 and 150 boxes into around 300 kilogram bales. Up to 100 bales accumulate every week which are then collected by an articulated lorry on a weekly basis. The total annual amount of cardboard: approx. 1,200 tonnes.

Benefits

- Fully automatic disposal of cardboard which is transported directly to the channel baling presses from the commissioning warehouse by conveyor belt.
- The increasing flow of boxes can no longer be dealt with if HSM channel baling presses are not used.
- Reliability: in future, the presses will be used in two shifts or 16 hours instead of the previous eight hours.
- Cost savings by reducing process steps: the boxes are compressed into bales on site, then can be directly delivered to paper factories.
- Less loading: instead of transporting every day as was the case with the press containers, an articulated lorry collects and loads 72 bales or about 21 tonnes of cardboard every week.

"Firstly, we wanted to find out if it made sense for us," says Steffen Strauß. The eight tonne press passed the practical test easily. The benefits far outweighed the two compactors they had previously been using. The channel baling press applies the pressure well and truly with a total of 450 kilonewton (kN). The unit of kilonewton describes the physical force required to be able to move a static body, in this case 450 kilograms, over one metre within a second. In one hour, the press converts up to 800 boxes into six to eight bales with a weight of around 300 kilograms.

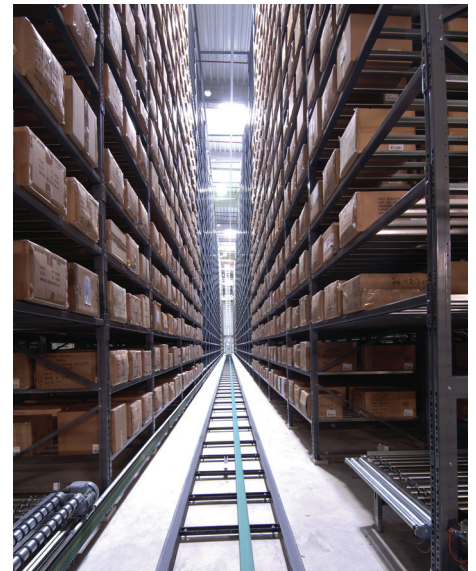
Desirable raw material

An added benefit: the channel baling press is fed automatically with cardboard. Staff in the commissioning warehouse just throw the empty boxes onto a conveyor belt which continuously transports the used cardboard over their heads to the baling press. Here they fall into the press's filling area (hopper) where the loose boxes are initially compressed. A sensor indicates that the hopper is filled properly. Then the actual pressing process can begin. Once the press has strapped three bales and pushed them onto the special three-metre bale slide, the forklift moves forward and stacks the bales in the disposal store. An articulated lorry comes to engelbert strauss once a week to load up 72 bales for transporting to paper factories. The corrugated cardboard bales are a very desirable raw material. The mail-order company currently receives 80 euros per tonne. Steffen Strauß therefore estimates the return on investment for the HSM channel baling press at two to two and a half years.

Longer running times in two shifts

In the meantime, the mail-order company has installed a second channel baling press from HSM. The reason: engelbert strauss is on track for further growth. The family-owned business will change over to a two-shift operation in autumn 2011 which will also

increase the demand on the disposal technology. The channel baling presses must then run for up to 16 hours a day. But Steffen Strauß is not worried that they won't manage it: "Both our presses work so reliably that even the longer running times in two shifts are possible."



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