

# Easy baling of extra large cardboard

Whenever genuine spare parts are needed for the vehicles made by large automobile manufacturers, the Rudolph Logistik Group in Baunatal, near Kassel/Germany, ensures they are available. Their spare parts logistics is an ingenious operation! This is now also true of the way they deal with the huge amount of waste cardboard generated. The contract logistics specialists found an optimal disposal solution at HSM, the Frickingen-based manufacturer of document shredders and baling presses: the HSM HL3521 S horizontal baling press. Thanks to its large aperture, even loading it with large cardboard sheets and boxes is quite effortless.

## **Customer quote:**

"We did a lot of experimenting. We have finally found an optimal solution in the form of the horizontal baling press made by HSM."

Jan Nette-Feldmann, branch manager of the Rudolph Logistik Group in Kassel-Waldau



Kassel is well-known as the city where the Documenta is held – the world's largest exhibition of contemporary art. For Jan Nette-Feldmann, this municipality in the north of Hesse is known for something else as well: "Kassel is one of the most important locations for genuine spare parts logistics," as the branch manager of RLG explains. Among other things, its importance is underlined by the dimensions of the warehouse which RLG operates in the freight distribution centre (GVZ) in Kassel-Waldau: 75,000 square meters. Around 14 containers sent by vehicle suppliers arrive here every day from all over the world, whether from Brazil or Mexico. They contain genuine spare parts for all current models, as well as older vehicles.

#### Tons of used cardboard

RLG stores a total of 18,000 spare parts in pallet cages, which are stacked over six levels, right to the roof, in the block storage hall. The sheer variation in the size of the spare parts, whether steering knuckles, coupling rods, wheel bearings or brake pads, means the variety of "cardboard modules", which are optimised for transport in standard containers, is equally large. Between 80 and 100 tons of packaging leave the warehouse every month, headed for paper factories or harbours for export. "That equals four to five truck loads," as Jan Nette-Feldmann reveals. Around 50 bales fit on one truck. RLG outsourced the disposal of its cardboard to Fehr. The Fehr group of companies is a major player in the recycling sector.

The Kassel company, together with their disposal service, considered how to recycle the enormous quantity of cardboard without creating problems. They found their answer at HSM in Frickingen. The Baden-based manufacturer of document shredders, shredders, cutting machines and baling presses had the right product on offer in the form of the HSM HL3521 S horizontal baling press. It is a powerful machine: weighing six tons and measuring nine meters in length. It is ideal for RLG because of its extra-large

# Facts

### Company

The Rudolph Logistik Group (RLG), founded in 1946, with headquarters in Baunatal near Kassel, is a logistics provider operating internationally. RLG maintains 30 facilities in Europe, and one in Dubai. Staff: 2,000 – 1,200 of them in Germany. Most recent turnover: 180 million.

#### Task

The demand for spare parts for the models made by the automobile manufacturer is large. The automobile manufacturer receives the parts produced by suppliers all over the world in cartons of all sizes. RLG was therefore looking for a solution to help them dispose of the 80 to 100 tons of cardboard which accumulate every month.

#### Solution

The HSM HL 3521 S loading flap press is the solution. RLG has been using one since January 2011. There are no problems when loading the baling press with cardboard boxes, which are compressed to bales weighing around 420 kilograms. This valuable resource is transported directly from the RLG yard to paper factories.

#### Benefits

- Large loading flap: thanks to a huge aperture, the press is easy to load.
- Cost savings by reducing process steps: because RLG presses the bales, with an average weight of 420 kilograms, directly on site, they can be taken to paper factories by truck immediately.
- Improved recycling: the compressed cardboard bales are a valuable recycling resource.
- Less transportation: around 50 bales, or 21 tons, fit on one truck.
- Continuous processes: no waiting around for new containers, and transport of the cardboard to the presses used by RLG's disposal company is no longer required.
- No rental costs for roller containers.

loading aperture: the huge cardboard boxes do not have to be shredded beforehand.

#### Very high compression

The pressing force is phenomenal: 320 kilonewtons (kN). The compression and volume reduction of the cardboard boxes is correspondingly high. Depending on the material, this can amount to 95 percent. Bales with an average weight of 420 kilograms are pro-

duced. Safety is also a priority: thanks to a light barrier, the pressing cycle can only start when no-one is working on or around the machine.

#### An end to experiments

The heavyweight cardboard bales which the press makes every quarter of an hour when running at full capacity are conveyed by a forklift directly to the yard in front of the hall. They are stored there until being transported away. The HSM baling press has been in operation at the Rudolph Logistik Group for half a year now. Malfunctions and downtime? "None at all" branch manager Jan Nette-Feldmann says, "it runs perfectly."

#### **Optimal solution**

The days of experimenting with different options in Kassel-Waldau are now a thing of the past. Before the baling press took up service in the warehouse, RLG used a press container which stood in the yard in front of the hall. The main drawback: while the containers were being disposed of, work stopped for up to an hour – until the empty container could be returned to RLG (a spare container was rarely available). The horizontal baling press has made a decisive improvement to the working conditions for the employees: the press container used to be outside, in front of the hall. "At temperature of minus 16 degrees, it is far from a pleasant workplace," as Jan Nette-Feldmann acknowledges. The baling press is now located in the warehouse, and only the cardboard bales are



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# HSM®

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