

FOCUS

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Bromberger Packungen GmbH, Germany

Good advice and reliable collaboration

For the last twenty years, Bromberger Packungen GmbH has worked with disposal technology from Hunkeler Systeme AG. It has been an open relationship based on partnership, a quality that this packaging company does not want to give up.

At Bromberger Packungen GmbH in Donaueschingen, Winfried Reichle is the head of Production and Finishing. He describes his relationship with Hunkeler Systeme AG as „open and based on partnership“. He has known and worked with this Swiss company for nearly twenty years, and they have always advised and assisted him and his company well and reliably.

„We will certainly turn to Hunkeler Systeme AG for our next project.“

Winfried Reichle, Head of Production and Finishing

A few months ago, a further step in good collaborative work was taken. Between October 2017 and January

2018, the packaging company put two new die cutters from the company Bobst into operation. The shredding, suction and compactor technology, which had been installed in 2006, was converted and adapted.

Safe disposal of 11,000 sheets per hour

The die cutters at Bromberger Packungen GmbH process cardboard of a flat weight of up to 600 grams per square meter as well as corrugated cardboard in B-wave quality. Suction technol-



Shredder SZM 1200 on both die cutter ensures that the stamping waste is removed from the production area quickly and efficiently.

ogy removes the waste in the blanking and stripping station of the Bobst machine. On both die cutters, the die cut waste is processed by a SZM 1200, a shredder developed by Hunkeler Sys-

hunkeler
Hunkeler Systeme

teme AG. Thanks to this shredding performance, even at a punch performance of 11,000 sheets per hour, stamping waste can be speedily removed from the process.



Suction technology uses the tried and tested negative pressure principle. A frequency converter controls fan performance, according to momentary requirements.

Low operating costs count

From suction at the die cutter to transport-ready bales, the disposal process for the punch waste is largely automatic. The waste is taken via a cutter and a conveyor belt to a press and compacted into bales. A tipping device enables the container to

„Technology that operates reliably is critical for cost-effective production.“

Winfried Reichle, Head of Production and Finishing

be emptied in off-line modus and the punch waste is transported via a second conveyor belt to the press. An automatically controlled crane puts the bales in a storage area until they can be transported away by lorry. The high level of automatisaton means low cost production operations.

But more important for Winfried Reichle is that for economical production, technology which functions reliably is crucial. He can look back on nearly twenty years of experience with Hunkeler Systeme AG's disposal technology. Actually, he can't remember a significant occasion where production was seriously threatened. What he does remember is how the service technicians were on site, in a very short time, when he really did need their support. Solidly constructed machines, operating security, reliable service – this is what Winfried Reichle appreciates, and what Bromberger Packungen GmbH are prepared to invest in. In the end, it is the running costs which define the economy of the production. And it is here where Hunkeler Systeme AG hold all the right advantages.



Dear Partners and readers

Printers, packaging manufacturers, recycling companies, disposal centers, distribution centers and national financial institutions from all over the world work with disposal technology from Hunkeler Systeme AG. This broad customer base illustrates the great trust given to our technology and our company. There is one important reason for this: all the work done by our engineering and software departments takes place in house at Hunkeler Systeme AG in Wikon. We are in the position of being able to recognize the needs of the customer and offer made-to-measure solutions.

Our customers needs constantly push us to greater innovations and to increased automatization of the processes. For us, this is a natural process, enabling us to integrate new functions into our existing solutions and to develop further as a company.

In order to satisfy customer and market requirements, and to deal with the number of current projects more professionally, we have strengthened the engineering and software departments this year. The complexity and size of the projects has increased from year to year. Our project leaders are expected to understand their customers requirements and to involve themselves one hundred percent in a project, from the start until the system has been put into operation.

For full customer satisfaction, the constant availability of the installed machinery is of central importance. We are further developing our remote diagnostics systems so that we can have a positive influence on the machine's functionality. Systems which are regularly and professionally maintained have a longer operating life span, maintenance costs are predictable and down-times for maintenance can be accurately planned.

For us, it is a positive and welcome challenge to offer and construct tailor-made solutions to our customers and partners in highly diversified market segments, ranging from standard systems to customer-specific plants, which fulfil extremely high security requirements in the security printing segment.

I hope you enjoying reading our Focus magazine, where we have pleasure showing you a wide variety of solutions and uses.

With warm regards
Kurt Käser, Managing Director

Project Engineering and Software Development

„Many disciplines are working together here“

At Hunkeler Systeme AG, Antonio-Daniel Pérez heads up system engineering. Andreas Frey is responsible for electrical planning and software development. We talked to them about the responsibilities of their teams.

Mr Pérez, Mr Frey, at Hunkeler Systeme AG you head system engineering and software development. How important are your departments to the company?

Andreas Frey: Very important. The projects that we plan and carry out are much more complex than they were five or ten years ago. Within this period, our teams have expanded greatly. Today, there are ten project leaders and five software engineers. This growth is also a result of the increased order volume.



Ten project leaders and five software engineers at Hunkeler Systeme AG ensure the perfect execution of customer specific projects.

What makes the members of your teams outstanding?

A.-Daniel Pérez: Our project leaders and software designers are outstandingly well trained professionals. As well as being specialists in their field, they all hold diplomas from specialized technical colleges.

Andreas Frey: Our team members have worked in all the various departments in Hunkeler Systeme AG. They understand in detail all aspects of suction, shredding and disposal technology.

A.-Daniel Pérez: People of very different backgrounds work in all our teams. This means multi-lingualism and a good understanding of various cultures.

Why is that important?

A.-Daniel Pérez: Our project leaders are deeply involved in each and every project, and are in close contact with the customer. They work out the costs and the tenders, plan the system, accompany the customer in the realisation of the system and are responsible for the commissioning of the developed system. The project leaders are always the first contact person for our customers, from the development stage of the concept up to and including the handover of the system to the customer.

Andreas Frey: This is also true for the software engineers. After they have written the programme, they are the ones who install it at the customers premises. They ensure that the system is working perfectly on site.

A.-Daniel Pérez: Many disciplines are working together here. The members of both our teams are highly qualified, both technically and in business practice, and they master the demanding responsibilities of project management.

Mr Frey, you develop the software in house. What is the benefit of this?

Andreas Frey: Firstly and most importantly, our customers are the beneficiaries. They work with machines that, mechanically considered, have a long working life. In contrast, software products and electronic components are by nature limited in their lifespan. By developing and installing new software and modern controls and installing them in existing systems, our customers are able to profitably use their machines over many years.

Large-scale system destroys four tons of bank notes per hour

A National Bank in central Asia has put the largest system for the shredding of bank notes into operation recently. Thanks to customer-oriented system engineering, Hunkeler Systeme AG was in the position to win the tender for this large contract.

A National Bank in central Asia has invested in a highly automated large-scale system for the destruction of bank notes. It is the largest and most efficient system of its type that Hunkeler Systeme AG has yet supplied to a financial institute. Two identically configured processing lines can each shred up to two tons of bank note material per hour. The end product is tiny particles. Their size of six by six millimeters corresponds to security level P5. The particles are compressed to compact briquettes and then burnt.



The two high performance systems shred per hour a total of up to four tons of bank notes. The end-product is tiny particles which are compacted to briquettes and automatically loaded onto lorries.

Customer requirements entirely fulfilled

That the system engineering department was focused on the requirements of the customer is one of the decisive reasons why the National Bank chose Hunkeler Systeme AG. The National Bank managers feel that the Swiss company has shown that it understands and is master of the complexities of such a system. The system from Hunkeler Systeme AG has entirely fulfilled the requirements for the secure destruction of bank notes in an automatically controlled process. The proximity to the sales and services center in Russia was another important factor in their decision.

2,000 briquettes an hour

The bank notes are delivered by lorries in bags which are manually emptied onto the conveyor belts. One single fill charge weighs 3.5 tons. The shredding process takes place in two phases, in a shredder and a downstream granulator. The line needs up to one hundred minutes for complete shredding of a charge and the compaction of the particles to briquettes.

One single briquette weighs more than two kilograms. Each line of the high performance shredding system can process 1,000 briquettes per hour. The briquettes are then automatically transported via rails to the lorries waiting in the external concourse area.

The process is continuously monitored

The two-phase shredding process and the compaction of the particles to briquettes are integrated into an automatically controlled workflow. The shredding of the bank notes takes place in several closed and secured sectors. Only authorised personnel, identified with a number code, have access to the room. Workflow-management-software monitors the secure destruction of the notes and bonds. The software continuously compares the feed quantities against the output quantity of shredded material. Every step of the process is recorded in a job report and can be traced back to the start.

„Hunkeler Systeme AG has demonstrated that they have mastered the complexities of large-scale systems.“

Management of the National Bank

Economic negative pressure principle

In this large-scale system, the fan is placed at the end of the process chain. The vacuum created in this way guides the bank note particles to cutters and then to the briquetting press. Due to the so-called negative pressure principle, the paper dust created by the shredding process stays in the conduits. The dust-laden air is then cleaned in a filter system.

80 tons of high-performance technology

The customer placed the order for the delivery and installation of the two shredding lines at the end of April. The shredder, granulators and briquetting presses have an overall weight of 80 tons. Twelve lorries transported the material about 6,000 kilometers from Wikon to the production site in central Asia. The installation began on the 30th of July; the system has been in operation since the 14th of September.



The two conveyor belts have a loading capacity of 3.5 tons each. The system is controlled from a locked control room.

Altola AG, Zuchwil (Switzerland)

Scrap wood shredder with outstanding features

At Altola AG the shredder XR3000C processes scrap wood of various classes. The shredder convinced through its robust construction and low operating costs.

Altola AG processes annually about 32,000 tons of scrap wood, classes A1 and A2, to alternative fuels at their location in Zuchwil (SO). After years of operation, a convincing technology for energy efficient shredding was required. With the XR3000C from UNTHA shredding technology, Altola has found the technology that fulfils their high requirements.

The principal client for the alternative fuel is Vigier Cement, which owns Altola AG. The specifications were clearly defined. The new shredding solution had to be able to process scrap wood, class A1 to A3, to material of a consistent granularity. What was needed was cutting-edge technology. In addition, Altola places great value on low levels of both wear and tear and energy consumption. After testing various products on offer in the shredding market, it was clear to Altola that the XR3000C was the best solution available. The decision in favour of the UNTHA-product was taken in January 2018. As Thaddäus Steinmann, director of solid alternative fuel at Altola, says: „The machine is up-to-date and head and shoulders above other products which we have tested.“

The motor of the shredder chosen by Altola is resistant to contaminants and scores additionally thanks to its low maintenance costs. Foreign bodies in the cutter are quickly and easily removed via a



The XR3000C shreds scrap wood, class A1 to A3, to alternative fuel with a consistent granularity.

contaminant discharging system. Hunkeler Systeme AG guarantees the customer rapid stand-by services, too.

Altola AG was founded in 1969 and is a part of the Swiss Vigier Group, which in turn belongs to the French concern Vicat. Altola sees itself as one of the most important providers in the collection, recycling, recovery and disposal of waste products business segment.

Bubu AG, Mönchaltorf (Switzerland)

Suction technology removes heavy cut-offs from the InfiniTrim

As one of the first bookbinding companies, Bubu AG produces books on the glue binder Vareo and the three knife trimmer InfiniTrim from Müller Martini. The milling particles from the glue binder and the cut-offs from the three knife trimmer are removed from the system with suction technology from Hunkeler Systeme AG.

The glue binder Vareo and the three knife trimmer InfiniTrim from Müller Martini form an in-line system for the production of books in various formats and with a varying number of pages.

One of the first users is Bubu AG. This bookbinding company, headquartered in Mönchaltorf (Switzerland), fabricates both paperback books as well as book blocks for first edition hard-cover books on the production line.

The work on the book spines on the Vareo causes milling particles; on the InfiniTrim, front-, head- and foot cut-off materials must be removed from the system. This is done by high-performance suction technology from Hunkeler Systeme AG. The automatic suction permits continuity in book production processes and allows even small copy numbers to be industrially produced.

Suction technology, positioned down-stream from the three knife trimmer InfiniTrim, handles a demanding task. The book block thickness can vary between 1 and 65 mm, the finished format of the cut book can vary between 100×100 and 350×310 mm (spine

length×bookblock width). However, the format of the uncut book block as it comes from the Vareo to the InfiniTrim remains constant. The cut-offs at the end of the trimming process can reach dimensions of 320 mm length, 100 mm width and 65 mm thickness. These cut-offs are glued in the spine and complete pieces, weighing up to 500 grams, have to be removed by suction.

Hunkeler Systeme AG has equipped other Vareo-InfiniTrim processing lines in England, France and the USA.



Suction technology from Hunkeler Systeme AG on the three knife trimmer InfiniTrim. The glue binder Vareo can be seen in the background.

The currently most modern disposal center is located in Canton Jura

The most modern disposal center in Switzerland, equipped with weighing technology and a software-platform from Hunkeler Systeme AG, is in Develier in the Canton Jura. In September, Georges Gobat SA opened their new waste material collection center. Cost-incurring material is registered, weighed and billed via an electronic registration system.

Georges Gobat SA is a family business headquartered in Develier. Their services range from waste management and waste-container service up to the recycling of secondary resource material. Didier Gobat represents the second generation in this family business. At the beginning of September, Georges Gobat SA opened a new



The concourse permits access to a maximum of eight vehicles at any one same time. The entrance is automatically closed to the next visitor until one of the vehicles has left the site.

disposal center which is, at the moment, the largest of its kind in Switzerland. The center has been equipped with electronic weighing technology and control software from Hunkeler Systeme AG. Approximately 1,400 inhabitants of the commune of Develier dispose of their rubbish here. Later, when the neighbouring communes are also included in this scheme, the number of visitors will reach up to 15,000.

Everything in an attractive wooden building

All the disposal points are housed in a closed, roofed concourse, attractively constructed in wood. Visitors can access the site using their personal badge. An information system registers each visitor as soon as they present the badge at the barrier entrance to the



Wood and mineral waste/unburnable waste is disposed of through large sized gates in the container. The containers stand on scales, the badge is debited according to the material and the weight.

site. Cost-incurring material is electronically recorded according to type and weight and the appropriate sum of money is automatically deducted from the corresponding pre-paid badge. Thanks to access restrictions, the number of visitors to the site can be controlled. A traffic-flow metering system ensures a smooth and steady flow of traffic. There is space on site for a maximum of eight vehicles. When this limit is reached, the entrance to the site is closed to the next visitor until one of the vehicles has left the site.

Two different billing principles

For the rubbish that the inhabitants of Develier dispose of, Georges Gobat SA is reimbursed by the commune at a flat-rate. The inhabitants themselves have no direct business relationship with Georges Gobat SA, they merely pay a fee for the disposal of cost-incurring waste. Georges Gobat SA can identify the badges only by number, not name. Personal data remains secure, this information is available only to the commune. Should the quantity of waste disposed of by an inhabitant exceed a certain limit, then



Styrofoam, hard plastics, ash and mineral oils are weighed on a floor scales and the resulting disposal fee is debited directly from the pre-paid badge.

the commune will invoice the inhabitant individually at the end of the year for the excess.

Another principle applies for all other clients who bring their waste to the Georges Gobat SA disposal center. They pay directly and according to quantity; the corresponding fee is debited directly from the credit on their pre-paid badge.

A courageous and worthwhile investment

For Didier Gobat, the new disposal system has a far-reaching usage. Previously, it was not worth the effort of identifying who disposed of what materials in what quantities. Electronic registration has permitted accurate monitoring and cost certainty with a comparatively low effort. Additionally, the entire disposal operation is transparent and runs efficiently. This courageous investment in the most modern disposal center in Switzerland means that Georges Gobat SA has achieved a clear competitive edge in their region.

Disposers' Day 2018 in Bern (Switzerland)

Modern Technology in focus

On the 31st of August, Hunkeler Systeme AG held their 2018 Disposers' Day. Approximately 60 guests from the German- and French-speaking parts of Switzerland travelled to the Schermen area in Bern, where the most modern sorting and disposal technology were presented.



Approximately 60 guests accepted the invitation to the Disposers' Day 2018. They received a guided tour of modern disposal technology from Hunkeler Systeme AG.

Bern's new disposal site

Three years ago, the city of Bern opened a modern disposal site on the Schermen area. At the site, visitors dispose of their material themselves. Billing takes place via a card with an integrated computer-chip. The disposal fee is debited from the chip, according to the weight and type of cost-incurring material.



Cornelia Kissling, Project Leader for the city of Bern, explains the new concept for the separation of waste using coloured bags.

Waste separation according to colour

At the beginning of September, the city of Bern started a pilot project. During the period of one year, 2,500 households sort rubbish, paper and cardboard, plastics, aluminium and metal, as well as glass, individually at home – each type of rubbish has its own colour-coded rubbish bag. The bags are collected by the refuse collection services once a week, and transported to a central collection point.

Document destruction at security level 4

During their visit to the Disposers' Day, the guests were able to see the paper sorting system from Alpbabern AG. They also had exclusive access to a high security tract, where Datarec AG destroys documents up to security level 4.

Hunkeler Innovationdays, Lucerne (Switzerland)

Two Premiers in Lucerne

At the Hunkeler Innovationdays 2019, Hunkeler Systeme AG premieres the Cutting Module SSM-570 and the Compact Suction Unit HKU 2000-N.

SSM-570 shreds stamping grids

The Cutting Module SSM-570 is designed for the removal and shredding of stamping grids downstream from the punches. During punch operation, rotating rollers guide the stamping grids to the cutting blade. A conveyor belt removes the shredded scrap web residue from the working area.

At the moment, the maximum operating web width for the SSM is 570 mm. At Hunkeler Innovationdays, the new Cutting Module will be switched on downstream from a rotating die cutter, BSR 550 Servo from the company Bograma AG.



The Hunkeler Innovationdays 2019 take place from 25th to 28th of February.

HKU 2000-N: nonstop operation on low space requirements

The new Compact Suction Unit HKU 2000-N ensures nonstop operation on an extremely small floor area with only one waste container. When changing a full container for an empty one, the paper waste is held back in a short-term buffer. Production can continue without interruption.

Widely diversified technology in daily use

As well as these two new products, Hunkeler Systeme AG is running a central suction system at their booth. In addition, systems for the secure destruction of files and electronic data carriers will be presented. With other exhibitors, there will be a total of ten HKU-compact suction units in action. The web de-dusting module I-PEM connected to inkjet web-feed machines will also be demonstrated in daily use at the Innovationdays.

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