

# Solutions for evacuation logistics

**Hunkeler**  
SYSTEME

## Tailor-made systems for waste disposal logistics



SECURITY PRINTING



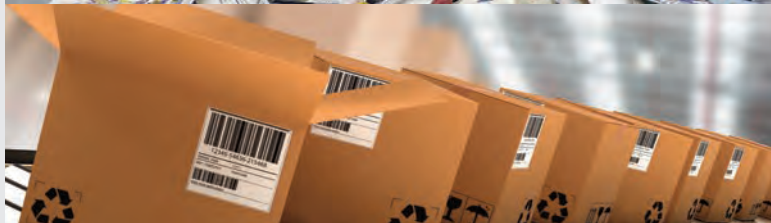
PACKAGING



DIGITAL | GRAPHIC



RECYCLING



LOGISTICS

### **Hunkeler Systeme AG has the perfect solution for your business sector**

We are providing solutions in the evacuation logistics segment for substrates like paper, banknotes, cardboard, foils, and general waste to ensure an efficient management of the waste. From the compact unit right at the collection point to the factory integrated system solution, we always provide the right scaled system.

# COMPETENCE



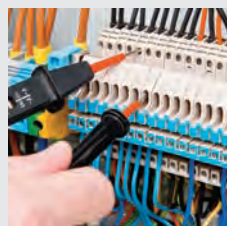
## From the idea and concept to the aftersales service

### All from one source and one experienced partner

Waste evacuation with a system, this is our world and our mission.

Throughout the production process where automated waste evacuation has to take place with shredding, compacting, sorting and de-dusting of waste or even security print documents, that's where Hunkeler Systems plays an important role all over the world.

The customer's requirements are met in many segments in the industry. It starts from the compact solutions for small and medium volumes of waste and reaches out to the integrated customized factory system with a long life industrial design. One of the outstanding competencies of Hunkeler Systems is the turn key solution concept, as well as having their own software development department. All out of one system provider – it starts with a concept drawing, and planning and ends with the engineering, implementation, start-up and training. All with the Hunkeler service support that is ready whenever you need it.



**Hunkeler**  
SYSTEME



## 80 years of disposal technology | 30 years as Hunkeler Systeme AG

The recycling of old and recyclable materials is an important economic factor. Hunkeler saw the importance of this eighty years ago. A look at the most important stages in our history.

- 1940** Hunkeler develops the first baling press for paper and cardboard. By the end of 1960, over 600 presses had been sold.
- 1970** The trading with single machines begins, automated baling presses, pressing containers and shredders are included in the product portfolio.
- 1980** The first extraction systems and complete systems are developed, the first international systems are implemented, exports begin.
- 1990** The founding of Hunkeler Systeme AG: out of a former department within Hunkeler AG, a legal stand-alone business is born.
- 2000** In Wikon, 10,000 square metres of land, including a storage building, are purchased.
- 2005** Hunkeler Systeme AG moves into a new office building, management purchases company shares.
- 2012** Move to a new production and assembly hall adjacent to the new office premises. The production area covers over 3,000 square metres.
- Current** Globally recognised, 80-person engineering company for tailor-made systems in disposal logistics. Construction of systems of any size for recycling companies, offset, digital and securities printing centres, financial institutes, packaging producers, large distributors, logistic centres.

EXPERIENCE



## Bank-notes and Security documents



### Bank-notes

During the production, the circulation and the destroying of bank notes, the security aspect is always critical.



### Security documents

Passports, credit cards, ID's and other confidential documents are fully controlled and securely destroyed.



### Bank-note printing

In the production of bank-notes, due to security issues, complete printed sheets or even rolls, are sometimes seen as production waste.



### Digital disk

The highest level of confidentiality is required for the disposal of digital storage devices and harddrives.





## Solutions



### Waste evacuation solution for security documents (bank-notes)

The most important factor within the process of destroying the security document is the proper security process. Every single step in the process chain is monitored, from the access point of the operators, to the automated fill in process down to the output of the required mini-sized particle.



Puncher for bank-notes in decentral locations



Mobile compact evacuation for medium sized waste



Briquettes with bank-notes scraps and dust

# PACKAGING

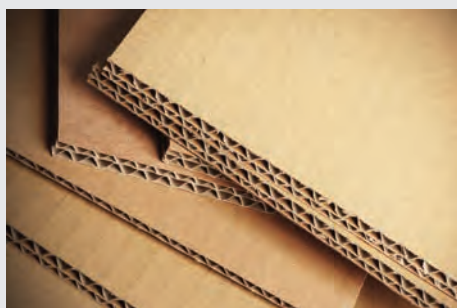


## Production waste



### Grey cardboard

Waste is generated out of the production of quality packaging material, that is used for product presentations.



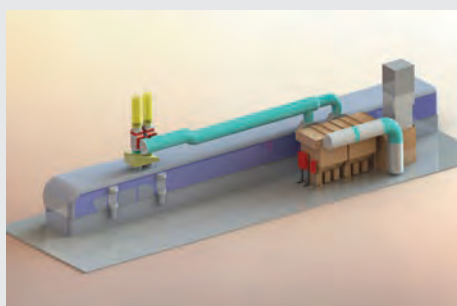
### Corrugated cardboard

Corrugated cardboard and the resultant cardboard boxes and waste are a central component of today's logistics.



### Flexible packaging

Widely used in packaging applications and in the added value process of packaging.



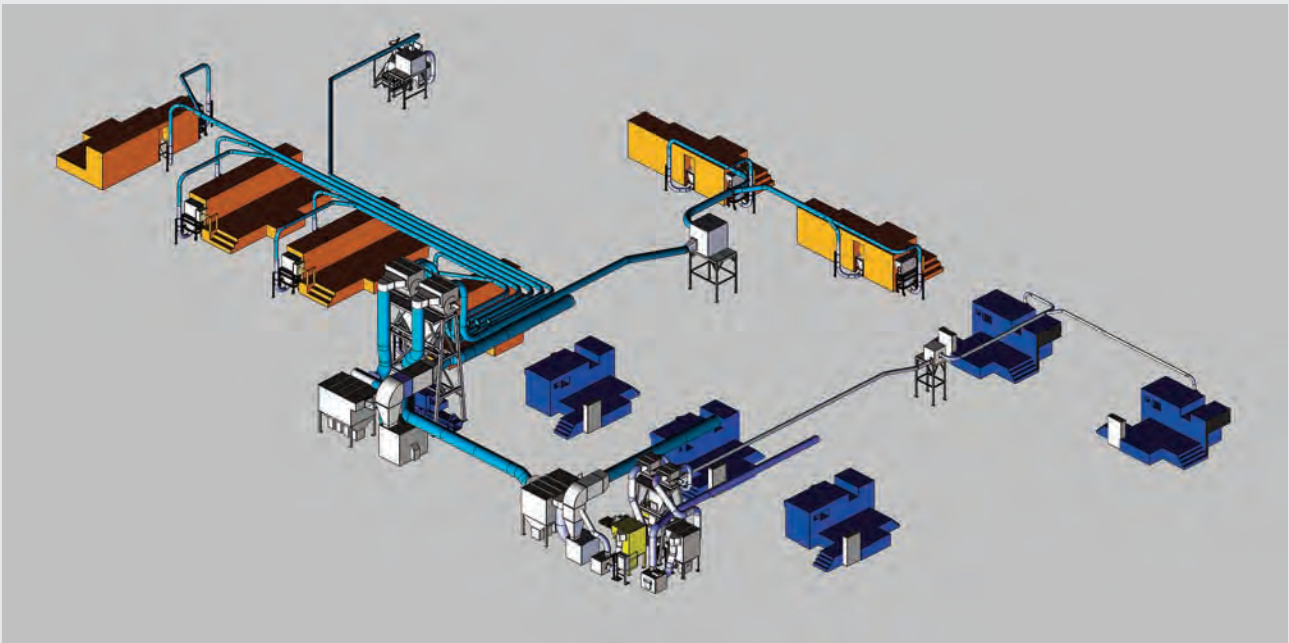
### Dedusting

The quality of the end products is increased and the work environment is further improved.





## Solutions



### Integrated into the production process

The economics of a waste evacuation system starts at the collection point at the production machine, i.e. for grey- or corrugated cardboard. To ensure total product safety, the shredding of a full size packaging sheet with misprints or quality issues is key. Customized solutions according to the requirements of the customer, are an integrated process in the logic chain of the entire production process.



Baling press, efficient handling of die cut waste



Crane systems ensure automatic operations



Shredder for die-cut grids and printed sheets



## Production waste



### Endless strips | cut-offs

Are generated in the post finishing devices after the print process.



### Paper dust

The paper-web de-dusting modules PEM and IPEM remove dust contactlessly from the paper-web.



### Newspaper spoilage | Books | Mailings

Are the most traditional products in the graphic industry that needs high quality finishing and trimming.



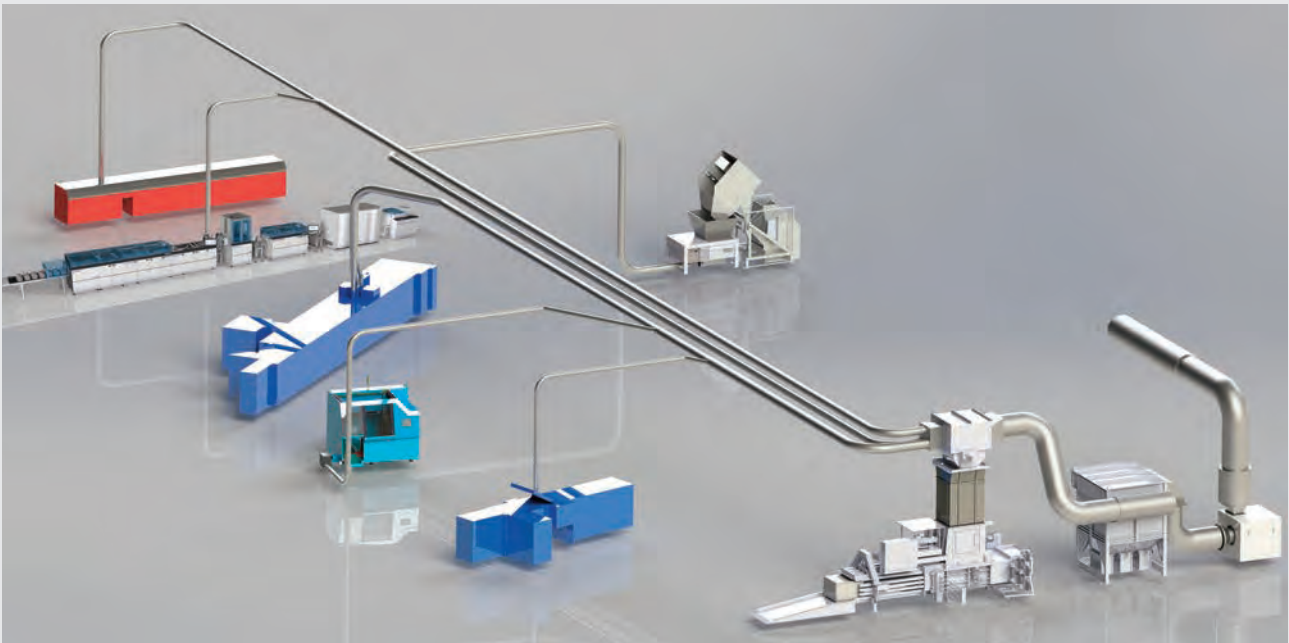
### Envelopes

In one step from the paper roll to the finished envelope. All the waste will be collected and sorted.





## Solutions



### Waste evacuation system for the Graphic Industry

The paper waste and dust is collected online at the collection point of the finishing machine and transported within a closed piping system towards the waste evacuation system. In many solutions, the output is compact, stacked bails. The dusty air is filtered in the jet filter-system and the clean air can either be transported back to the production room or outside of the building.



Conveyor for large format waste



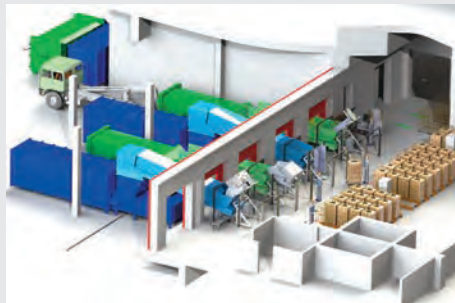
Hunkeler Compact Unit  
HKU-2000-N nonstop



Paper bales, compact, stacked,  
ready to transport



## Applications



### Distribution centers

All different waste types from the point of sale are sorted according to the types of waste material. Afterwards shredded, compacted and delivered to the recycling company.



### Compact baling presses

Even bulky waste or packaging elements can be perfectly compacted with a vertical or horizontal press.



### De-dusting systems

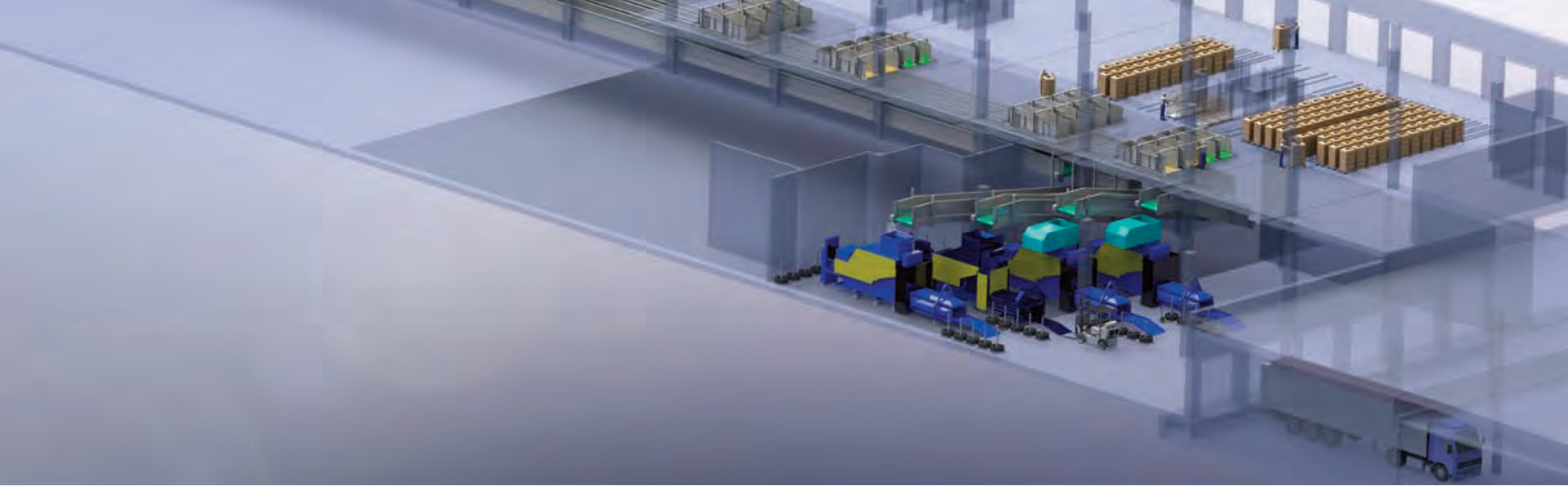
The mobile de-dusting devices filter dust, fine particles, germs and bacteria from the ambient air. Standard fitting means that the machines are delivered with ISO certified filters.



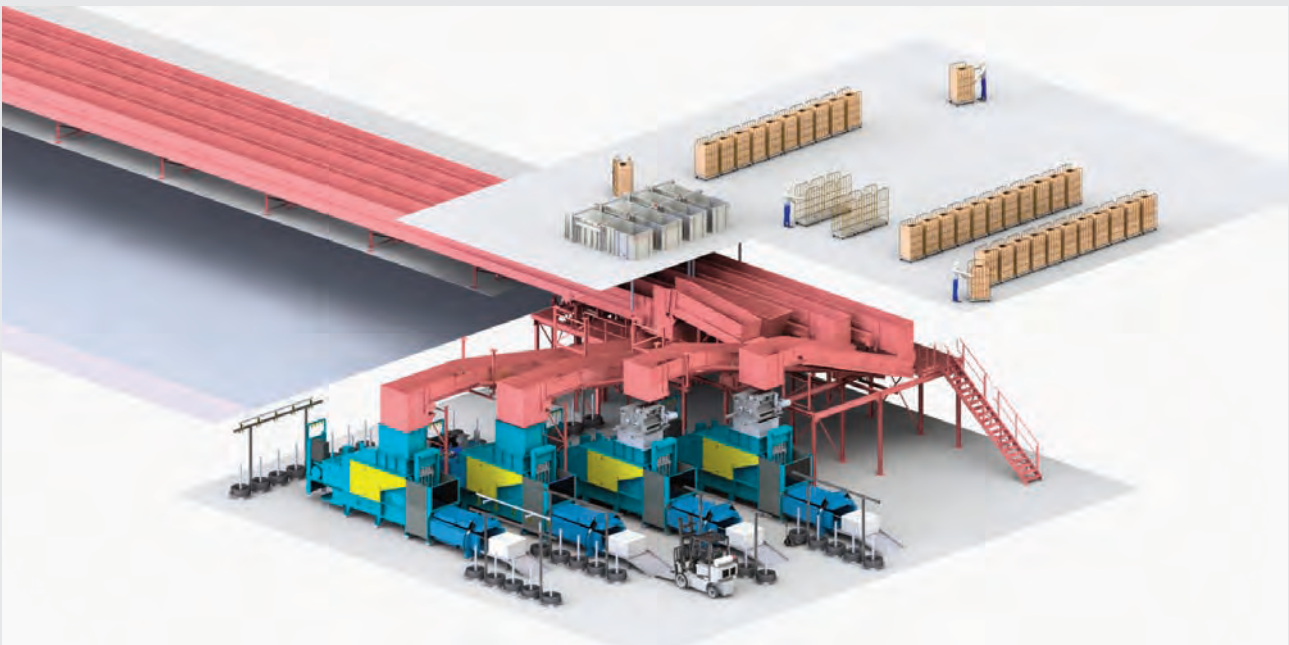
### Sorting systems

Sorting systems collect, transport, separate and compact resources such as paper, cardboard, foils and PET for recycling as secondary source raw materials.





## Solutions

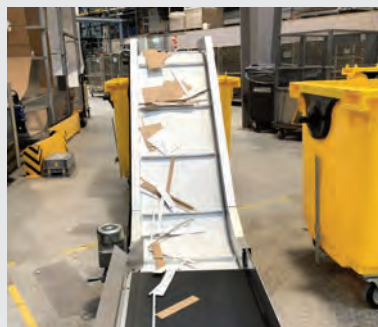


### Disposal solutions for logistics

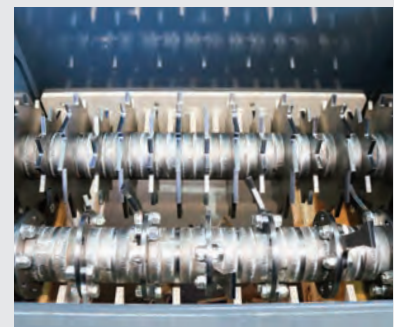
The waste from sales outlets and orders from logistics centres and online-shops are sorted according to type, shredded, compacted and transported to recycling centres. The homogenous separation of secondary resource materials for recycling purposes has become very important.



Reduction of personnel and manual work



Enable non-stop production



Shredding of cardboard waste with the HKZ Shredder



## Baling presses

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### **Baling presses with concentrated strength**

Our product portfolio ranges from vertical, horizontal on up to fully automatic baling presses for professional waste disposal companies. Anywhere where large quantities of waste accumulate, our products are a guarantee for efficient disposal logistics.

## Briquetting presses

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### **Briquetting presses with maximum volume reduction**

The patented system of the hydraulic chamber briquetting press means efficient compaction of many different types of material to briquettes of homogenously high quality. The compact briquettes ensure not only efficient disposal but are also an important step in the preparations for material recycling.





## Styropore compactor

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### **Styropore compactor – minimal effort, maximal compaction**

With its innovative technology, bulky foam wastes made of EPS, EPP, XPS are transformed into compact blocks in an admirably economical manner.

## Press container

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### **Press container for various materials**

Self-pressing containers, as well as stationary systems, have been specifically developed for all waste sources where large quantities of waste or recyclable materials are produced.



## Document destroyer

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### **Document destroyer – guaranteed secure**

The shredding and compacting of documents is an efficient step in data protection. Thanks to progressive technology, our systems can be used for single sheets and complete files up to and including the destruction of electronic data carriers.

## Shredder

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### **Industrial shredders – reliable technology and efficiency**

The robust construction with the strong blades guarantees great reliability and thus overall strong total performance. Materials such as paper, cardboard, wood, bulky items, synthetics etc. are easily shredded to the desired size.





## Weighing technology



### Weighing technology – cost transparency

In the last few years, the basic situation with regards to waste management has changed dramatically for disposal centres, communes, housing companies, shopping centres, enterprises etc. With the integrated weighing system «Weigh and Compact» an intelligent form of disposal invoicing has come about, one that has brought many advantages, technologically, ecologically and economically to the operator.

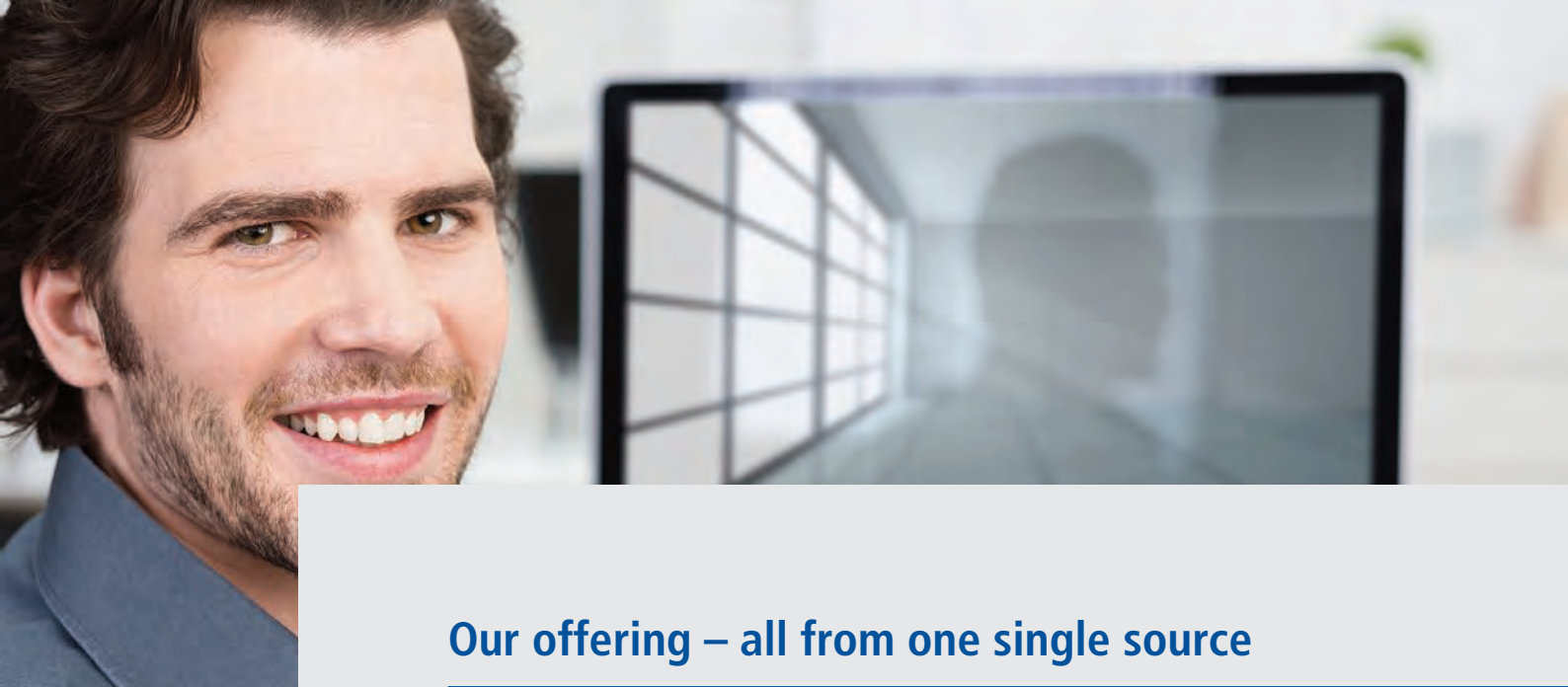
## Disposal centre



### Automated disposal centre

We deliver solutions in disposal logistics for resource materials such as paper, cardboards, foils, rubbish, to guarantee the efficient management of waste materials. From a compact solution at the source up to integrated system solutions with intelligent weighing technology, we have everything for the support of an automated production process.

# ENGINEERING



## Our offering – all from one single source



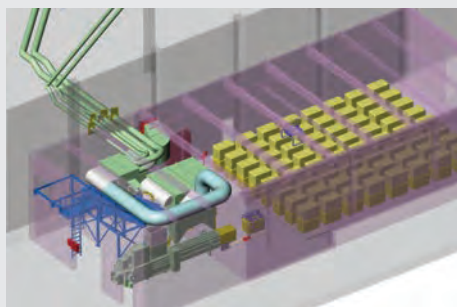
### Consulting

All out of one system provider – it starts with a concept drawing, the planning and ends with the engineering, implementation, start up and training.



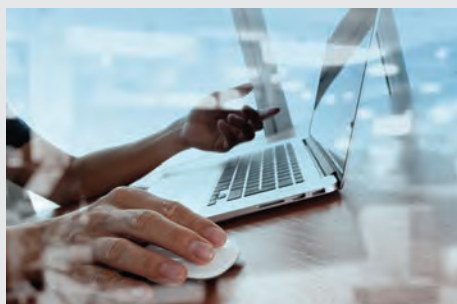
### Engineering

Our system engineers analyze your requirements with 3D visualizations and virtual process animation. The result is a high quality customized solution.



### Customized solutions

Over 4000 satisfied customers around the world are working with Hunkeler Systems. Our engineers are designing the system together with you according to your specific needs.



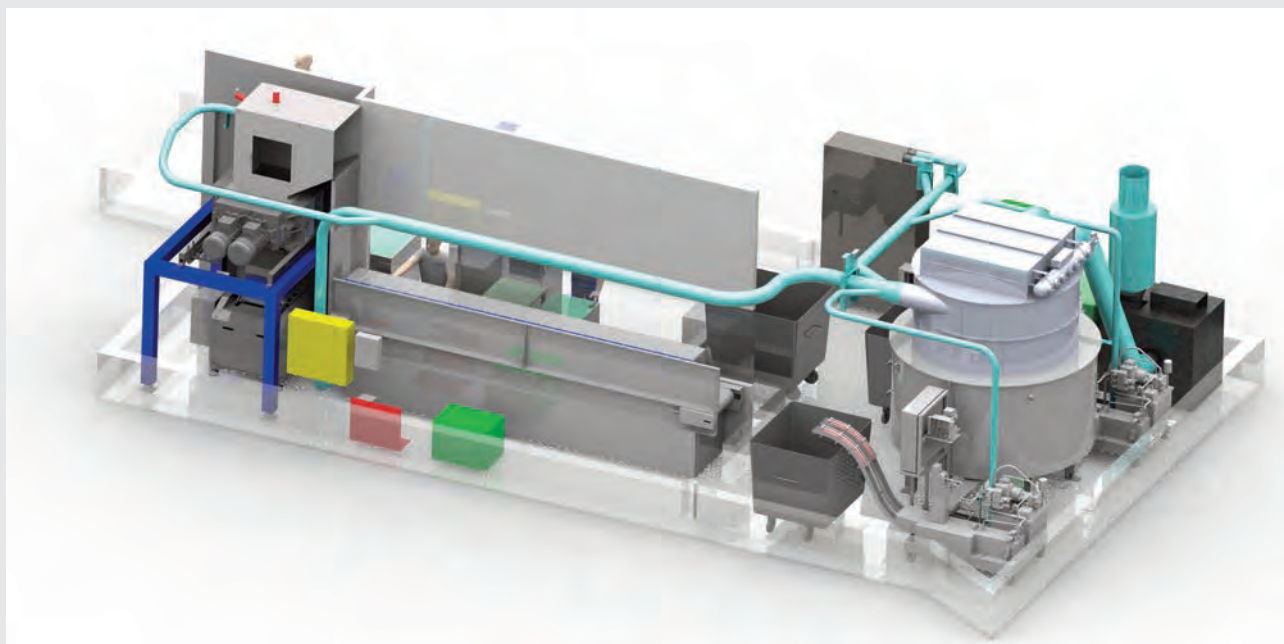
### Control software

Optimal function and availability can only be guaranteed if the software is adapted to all the plant processes. Hunkeler programs all systems in their own software and control department and can thus offer fully integrated support, even with a remote system.





## Solutions



### Customized solutions

The personal consulting of our engineers at the customer location is the foundation for a proper system definition. Our system engineers analyze your requirements with 3D visualizations and virtual process animation. The result is a high quality customized solution.



Save energy and reduce the running cost



Intelligent workflow software with job reporting features



Extend the system life-time with the controller retrofit upgrade



## Our offerings



### After sales service

We care about customer satisfaction. The relevant preventive maintenance is the base for high performance. Our service engineers are prepared to support our customers.



### Integration on site

We guarantee an on time installation and production start with our competent and well trained service and system engineers.



### Hotline support

The hotline in combination with the remote service system are the base to support our customers quickly and precisely.



### Training

Well trained operating and service personnel are the foundation for the high productivity of the systems. Training courses are available at customer sites or in the training center in Switzerland.





**All from one system provider**



#### **Competence from one source**

Our team is always ready to support you, during the planning and design, within the installation and as well in the service and support period of the project. Our goal is to understand the customer's requirements and expectations. Offering customized solutions – live sustainability – guaranteed service.



Our service team is ready to support you



Original spare parts are available from our stock



Our consumables guarantee proper operation

## Your competent partner



### Ecology and Economy in a single nutshell

The modern GreenLineConcept from Hunkeler Systeme AG has made active environmental protection economically attractive.

The GreenLineConcept focusses on efficient use of energy, thoughtful use of resources and a reduced demand on technical infrastructure. An intelligent control system with integrated on/off automatic switching triggers the idling state and the re-activation of an extraction system when production is no longer taking place. With the Energy Saving System, the air volume is dynamically regulated in accordance with the quantity of material to be disposed of. Experience shows that a realistic energy reduction of up to 60% can be achieved.