

Daily transport of commodities **Bulk handling... On the move.**

Bulk products are often difficult to handle. They are usually natural products with undefined shapes and structures that are not easy to stack. Sand, gravel, soil, coal, seeds, fibre and grain are some examples of those bulk products. Many raw materials that are incorporated into consumer articles in other locations.

Willems Baling Equipment knows very much about handling, packing and transportation of bulk goods. Just ask!



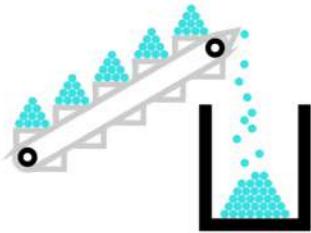
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Transport should never be the weakest link in the chain. Nevertheless, anyone working in a production environment knows that transporting raw materials, semi-manufactures and end products always gives rise to additional risks. Products should be treated with care to avoid damage or collision. Also, external factors such as moisture or dust may not affect the products. When fewer human hands are needed we can guarantee that the passage will go faster and with minimal risks.

As a worldwide leading producer, Willems has a lot of experience with connecting transport systems. We choose products with a perfect track record and reputation, which work smoothly and require minimal maintenance. We connect all components with each other to a complete and reliable production line.

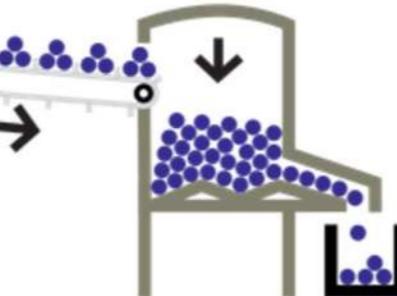




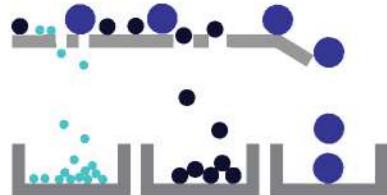
Overcoming height differences



Transportation using augers



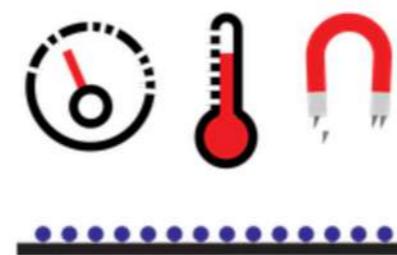
Buffering (input, storage, output)



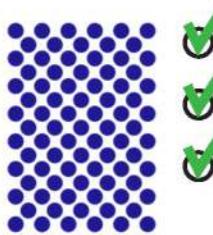
Screening (selection and sorting)



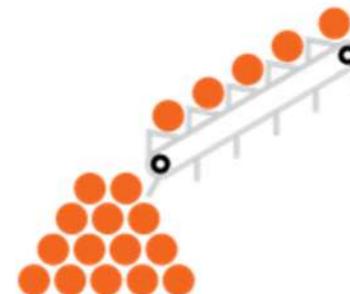
Merge (mixing and dosing)



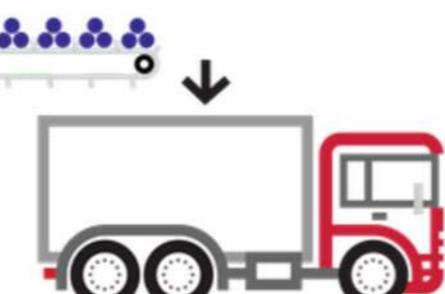
Checking (inspection and detection)



Keeping quality and specification



Separation of bulk transportation



Truck (un)loading systems

UNIQUE SPECIFICATIONS

Willems

Willems belongs to **the market leaders** in top-class packaging systems. The products to be packaged differ greatly from each other. In most cases, we are talking about bulk goods pressed in bales. Then, the rectangular bale can be significantly handled, transported, stacked, stored and presented. Both for supply of raw materials to bale presses and for pressing of bales itself, appropriate systems are required to transport both bulk and goods transport efficiently through the production line.

Willems Baling Equipment was founded in 1992. With pride we look back on countless successes in design and development of special packaging lines, both with machines and all associated transport systems to connect the units. Ideas from experienced engineers and creative designers come together in smart solutions for complex issues. Every day. And... the best is still to come.

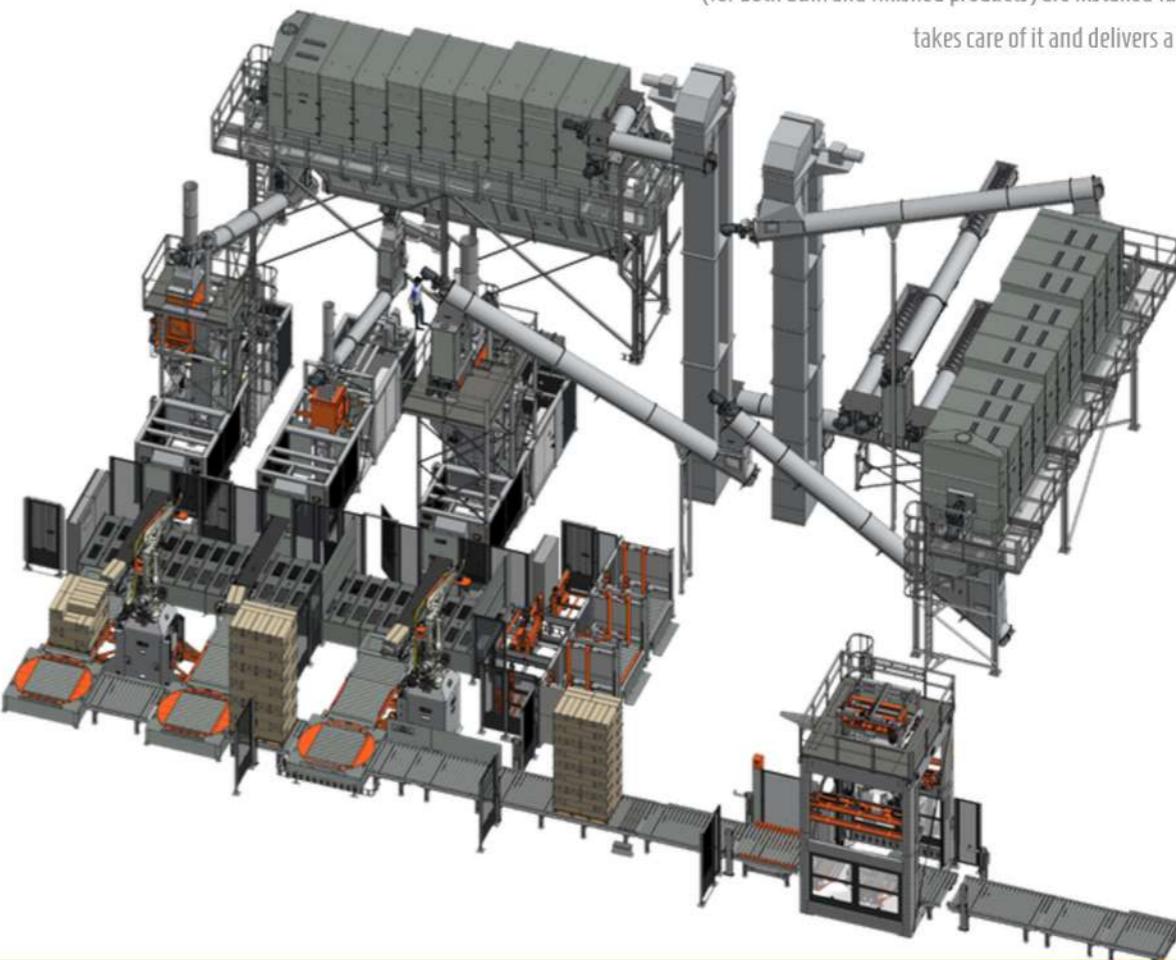
Turnkey

To allow a production environment to run smoothly, installing stand-alone machines is insufficient. It's important to have experience in optimisation of the total operational work flow, from start to finish. Fine-tuning and synchronisation of the various machinery and connecting conveyors are essential to generate perfect output.



Transport from the start (supply of raw materials) can be automated and streamlined. Transportation from one to all subsequent processing sites and finally stacking and moving of finished products to storage or transport, it can all be done without human hands by using intelligent transport systems, specially designed and arranged for their particular tasks.

Our company develops and produces innovative packaging systems for our customers worldwide. Total installations where machines plus all connecting transportation systems (for both bulk and finished products) are installed fully and perfectly matched. Willems takes care of it and delivers a complete production line. Turnkey.



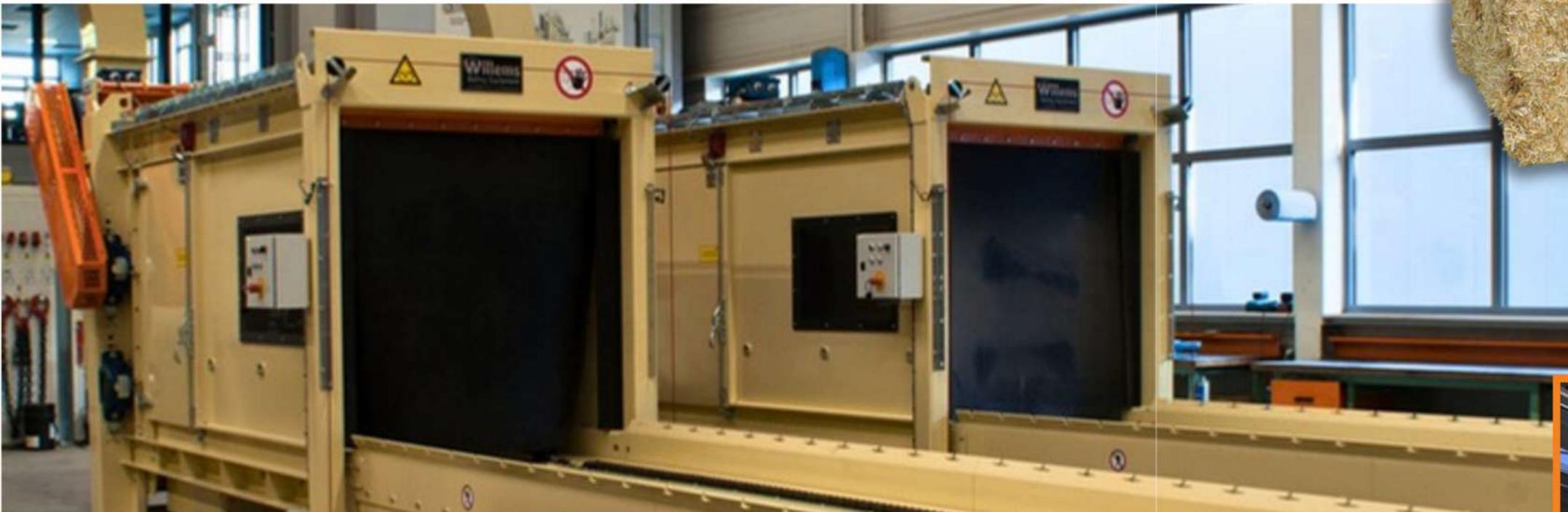
A complete packing line with wood shavings input....
and output of bales with cleaned wood shavings packed on pallets

Visit website for
further information

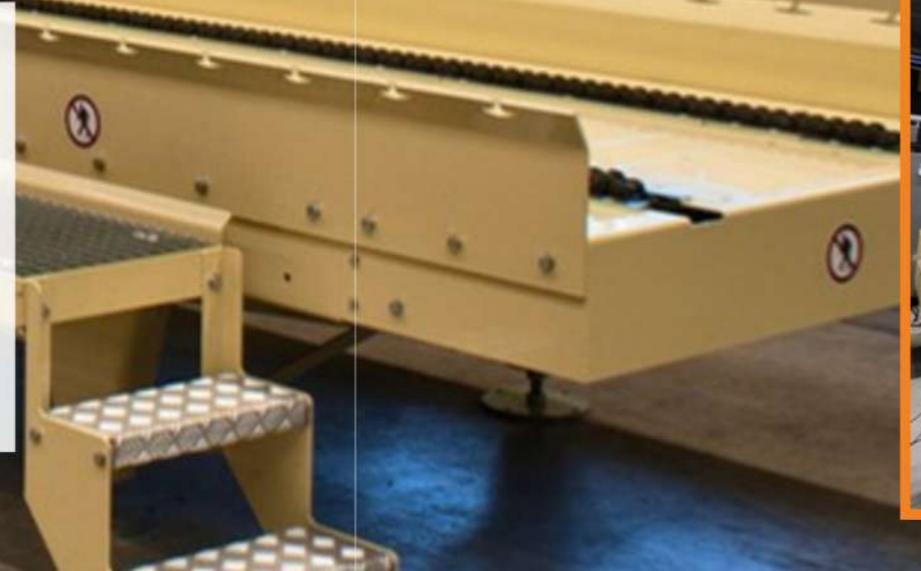


Bale breakers

Willem's
baling equipment



The so-called "bale breaker" is suitable for straw, hay and similar products. The machine breaks up the bale, and creates a flow of loose material. Via air transport the product is fed further into the process. Where a hammer mill can chop the product to the desired length. Stones and other foreign objects are removed from the product. By transporting the product through a drum screen, we separate the fines and dust. These products can be packed into bales via a Willem's baler in small or big bales, ready for the end user.



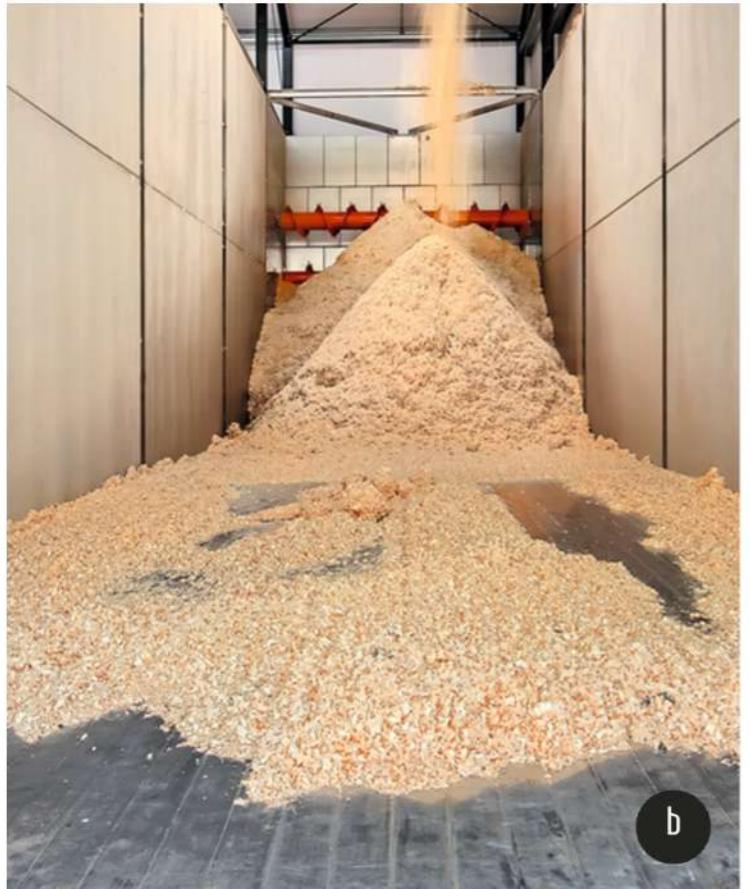
Input and buffering bulk products

Buffer and infeed bunkers

Bunkers with augers on the bottom and conveying Floor bunkers are used to buffer bulk material. The bunkers are designed for various products.

Several possibilities:

- a Screw conveyor bunker
- b Conveyor floor bunker
- c Buffer bin
- d Silo discharge system



Transportation



Several possibilities of transportation:

- a screw
- b redler
- c belt
- d air

Choosing the best-suited system depends on your wishes as a customer and the technology that gives the best results. Due to our extensive experience with all transport techniques, we can advise you professionally.



b

d

c

d

Screens



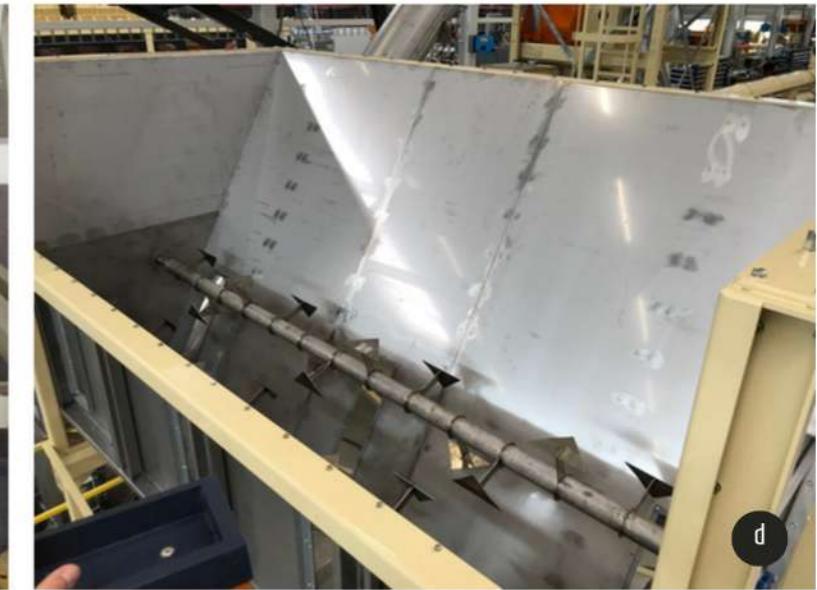
Several screening options

- a Drum screen
(separating fines + air born dust)
- b Star screen
(separating oversize)
- c Wind sifting
(separating impurities)



Specials

Willem's
baling equipment



Several possibilities of transportation:

Loading deck

a

Stainless steel bunker

d

Magnetic drum

b

Additives dosing

e

Fluid injection

c

Magnetic hatch

f



Clever design
smart in every small part

Rexroth
Bosch Group

SIEMENS

SEW
EURODRIVE

SMC

Willens

QUALITY is on the basis of durability and reliability.

Willens is highly critical of both, own production and components from our suppliers. All these components have to fit and work together smoothly in our machines and connecting transport systems.

"Always be aware of the weakest link..."

And since we cannot and will not produce everything ourselves, we only hire professional suppliers who share the same mentality and enthusiasm. Reliable suppliers who produce their specific components to high standards.

Top brands with a good and solid reputation.

Innovations are important to get along with the demands of today and to be able to continue to meet new wishes and requirements. Our suppliers are - as we are - constantly working on product improvements.

Having been extensively tested, Willens applies them. We always want to provide you with a product that is top quality.

You can rely on that 100%!



Service and parts

Willem's
baling equipment

Spare parts
Maintenance
After sales
Responsible partner
Teleservice

Willem's builds robust machines to last for long. All integrated systems and electronics meet the highest standards so reliability is guaranteed. Our involvement does not stop when the system has been sold. Willem's feels responsible for trouble free operation of the total production line, 24/7. Via built-in modems in machines, we can monitor data online and any malfunctions can be cured or even prevented from a distance. If necessary, we ensure that experienced specialists are available at your location to keep your production line in good condition. Everywhere, worldwide.

Reach us on:



Service and parts

Quality

In manufacturing, a measure of excellence or a state of being free from defects, deficiencies and significant variations. It is brought about by strict and consistent commitment to certain standards that achieve uniformity of a product in order to satisfy specific customer or user requirements. ISO standard defines quality as "the totality of features and characteristics of a product or service that bears its ability to satisfy stated or implied needs."

Reliability

1. The ability of an apparatus, machine, or system to consistently perform its intended or required function or mission, on demand and without degradation or failure.
2. Manufacturing: The probability of failure-free performance over an item's useful life, or a specified timeframe, under specified environmental and duty-cycle conditions.

Efficiency

The comparison of what is actually produced or performed with what can be achieved with the same consumption of resources (money, time, labour, etc.). It is an important factor in determination of productivity.

A family owned business



Since its foundation in 1992, **Willems** has grown into one of the industry leaders. Nowadays the Willems brand is synonymous with innovation and top quality. We invest in the latest developments in machine construction. Our designers work on machines that are safer, faster, more efficient and even more precise. Modern techniques and continuous improvements result in reliable machines that meet the highest standards of effectiveness.

All disciplines are represented in our enterprise; designers, constructors, production staff, service engineers. From the first ideas and sketches up to installing and adjusting machines on your location, our professionals are prepared for the job. Brilliant ideas from experienced engineers and creative designers come together to create smarter solutions. Everyday.



Productrange

Willem's offers total solutions for compressed packaging of bulky products; high quality machines for screening, weighing, compressing, packaging and palletising. All of them easy to integrate into your production line.

log shavers

Transport and processing of logs Our systems for **length- and sideways transport** supply via step feeders the debarker and log shaver. **Log shavers** are equipped with advanced interchangeable blade cassette for optimised production.

bulk handling

Not only the machines, but the entire logistics of production can be delivered by Willem's turnkey. **Screens, transportation and buffer systems** belong to this. **Drum screen** for separation in two formats; small parts fall through the screen, large parts remain. **Star screen** to remove large parts from the product too. **Airscreen** for product-specific applications.

Chain, belt, screw conveyors. Horizontal and inclined screws with various dimensions and capacities, depending on the product. **Conveying floor bunkers** or bunkers with screws for buffering are being produced to the client's specifications.

balers

Willem's supplies horizontal and vertical balers for compressed packaging of various products. Depending on your wishes, our presses produce bales with weights between 1 and 1500 kg.

Products: Alfalfa, bark, cellulose fibres, flax, fiberglass, glass wool, grass, hay or straw, hemp fibre, insulation material, corn, mulch, nylon fibres, paper pulp, potting soil, compost soil, pulp fibres, sawdust, short dusty fibres, silage, substrates, synthetic fibres, peat, wood chips, wood shavings, etc.

Bundling machines for merging small packages.

The machine collects products, packs two pieces of foil on roll and draws the film over the formatted products.

Form filling machine for pellets and other release products. Capacity: Depending on product specifications tailored to customer requirements.

FFS machines (Form Fill Seal) for the disposal of bulk products.

robots

Our high end **robot palletising systems** can be easily adjusted to requested, constantly changing product specifications and sizes. For example for stacking bags, bales or barrels.

pallet packaging

Our experience in designing and building high-quality packaging systems led to **the ultimate stretch hooder and wrapping machines**. These offer an excellent solution for a large number of pallet packaging needs during storage and transportation.

refiner

We developed **turn-key refiner-lines**. Due to the RMP-process and the intuitive operation via the touchscreen, you can produce **specific fibers** that suits your purpose. The gap distance is changeable with one push on a button so various products can be fiberized into different fraction sizes.



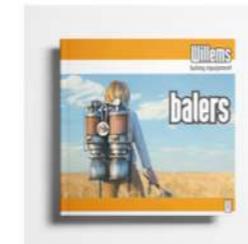
log shavers

- Log transport system
- Log shavers
- Grinding machines



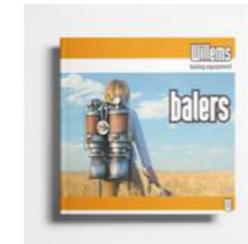
bulk handling

- Stationary and conveying floor bunkers
- Chain conveyors, infeed systems, redlers and air transport
- Screening
- Truck loading- and unloading systems



baling equipment

- Balers
- Flatfoil machines
- Form filling machines
- Bundling machines



pallet packaging

- Stretch hooders
- Bricks packaging machines
- Insulation sheets bundling machines
- Wrappers

Product brochures

robot handling

Robot palletising systems
Pallet transport
Special Features



refiner

RMP-process
Willem's Refiner Solutions
Products

