



robot handling

**Willems**

baling equipment



Although we are surrounded by modern automation and state-of-the-art gadgets in our daily lives, robots do still fascinate us and tickle our imagination. Especially if they are designed to look and act like humans. In modern industry robotisation is a common phenomenon with designs of robots that are fully dictated by the functionalities desired.

Willems embraces that new possibilities and uses robots to perform many specific tasks. Time after time.

We don't want to live without it  
**Automation, daily comfort.**



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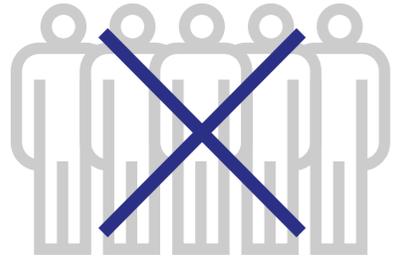
willemsonline.com



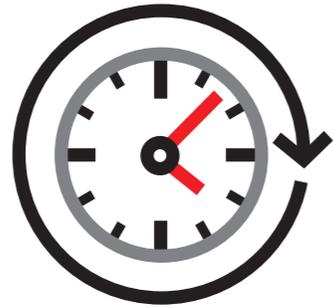
**Willems**  
baling equipment

# Industrial robots

are specially designed, equipped and programmed, to perform their (complicated) tasks, for example in the production of cars. They weld, spray and assemble and shape sheets of metal to a real car. Also in the packaging industry, robots are indispensable in packing, stacking and wrapping. Safe, fast and accurate.... always. What could we do without them?



Reliable alternative for human power

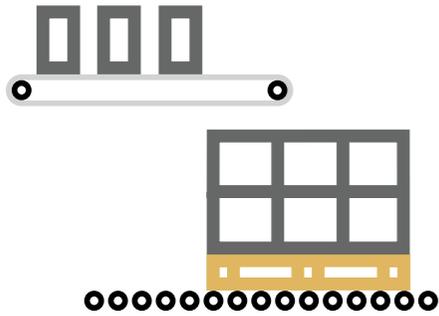


24/7 around the clock



PLC-control and long distance servicing

## UNIQUE SPECIFICATIONS



Efficient production and pallet handling



Multifunctional and accurate



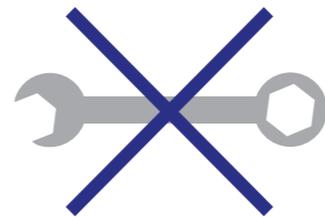
Safe work spaces



Fully programmable



Many robots can operate in line



Minimal maintenance

Willems belongs to the market leaders worldwide in top-class packaging systems.

We design and produce complete packaging lines in our own home, where we have all high end facilities to work carefully and efficiently. In the handling of bulk goods, pressed bales and pallet packaging, robots are used in many stages.

Industrial robots act on key positions in the process; moving, positioning, tilting, turning, wrapping and stacking are executed with great precision. Consistent and reliable.

Of course Willems does not develop those robots; it requires specific know how and skills. That's why we work closely with a world-leading producer. We feed them with all requirements of our customers and their designers will come up with dedicated solutions.

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. For more than 25 years.

And... the best is still to come.



# Kawasaki robot

Kawasaki's high-quality industrial robots are equipped with specific options and integrated in the total routing.



# CP

Industrial robots in 3 different types:

## CP-180-LEE-03

- tilting capacity up to 100 kg
- equipped with vacuum head
- single vacuum head: up to 700 bales/hour
- double vacuum head: up to 1,000 bales/hour

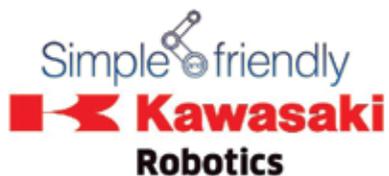
## CP-300-LEE-03

- tilting capacity up to 200 kg
- equipped with vacuum head
- up to 50 units/hour

## CP-500-LEE-03

- tilting capacity up to 320 kg
- equipped with hydraulic gripper
- up to 30 units/hour





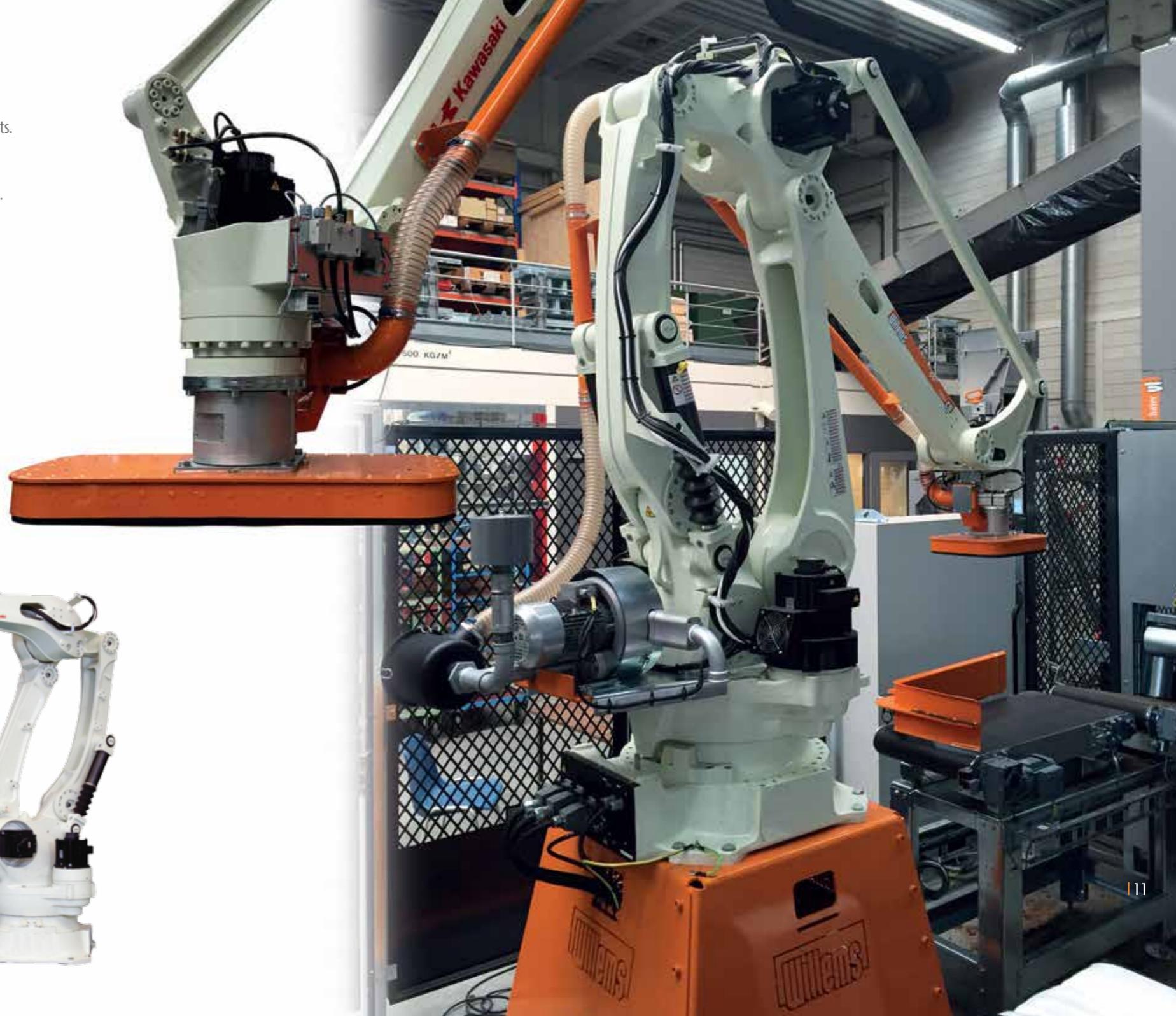
Since 1997 Willems Baling Equipment is an official dealer of Kawasaki Palletising Robots. During this period Willems has built up a broad experience in handling bales, bags, boxes and pallets. We have already built more than 150 robot palletisation installations.

Kawasaki is one of the world's leading manufacturers of industrial robots. The Kawasaki CP Series is designed specifically for palletising and is equipped with the latest technology to meet the demands of users. Operators without special skills can program and operate the Kawasaki robot after a short and basic training of our engineers.

The palletisation program can be easily manufactured by using the user-friendly palletising menus. For a full pallet load, only a few values such as the number of layers, number of rows, number of columns, and product dimensions need to be entered.

The Kawasaki robot's motion pattern is very precise, thanks to the high-resolution position encoders, AC brushless servo motors and the clearance-free precision cycling transmissions. Due to the smooth movements and high repetition accuracy, the robot is capable of achieving perfect stacking patterns.

The high speed of the robot and the fast moving of the 4th axis make the robot to a machine with high production capacity. The absolute metering system allows, for example, an emergency stop and the robot can -without synchronisation or other programming operations- retain its task to stack directly on the position where it stopped.





Industrial robots can be used for many different operations. Which can be carried out with extreme precision and ultimate operation reliability; time-after-time.

Such as: STACKING TURNING POSITIONING MOVING  
WELDING PICKING SPRAYING MOUNTING  
EXCHANGING FIXING ASSEMBLING et cetera...



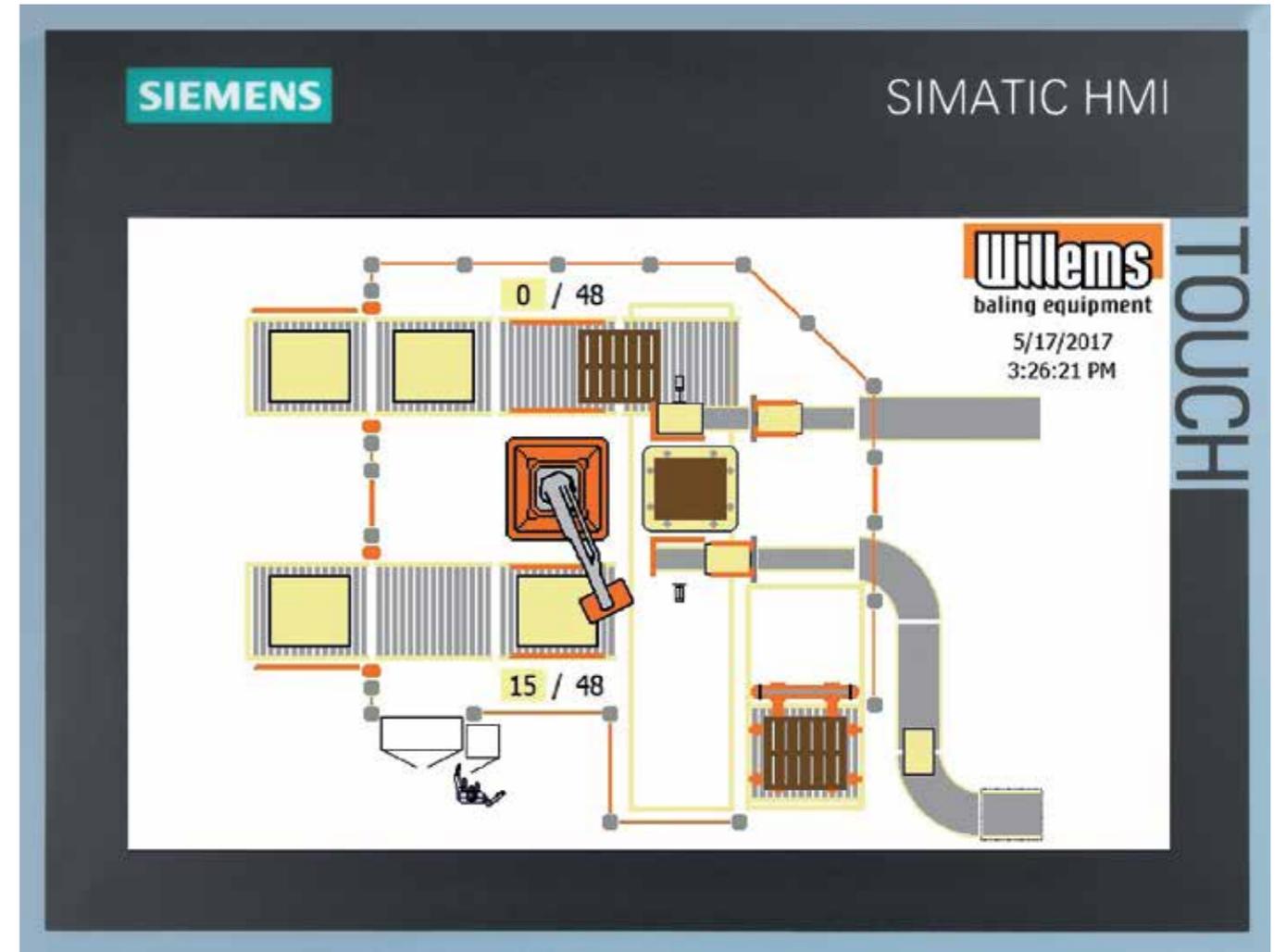
# touch screen management

The robot with roller tracks can be operated from the cabinet using the Siemens Touch Screen.

By activating the desired item on the color touch screen you will open a menu in which the settings can be changed. The system also contains the advanced Siemens automatic error messaging. The operator's task is to enter only the desired stacking patterns (which are preprogrammed) and the robot is operational.



The clear touch screen shows the entire setup. By selecting the correct icons the desired section is operational and you can easily change the parameters.



```
<!DOCTYPE HTML >  
<html>  
<head>  
<meta name="TITLE" >  
<meta name="KEYWORDS" >  
<meta name="DESCRIPTION" >  
<link rel="stylesheet" >  
<script language="JavaScript" >  
#ffff
```



Robots can be equipped with functional options:

- (a) metal detection
- (b) turn over
- (c) sheet feeder
- (d) pallet feeder
- (e) check weigher
- (f) lift roller track



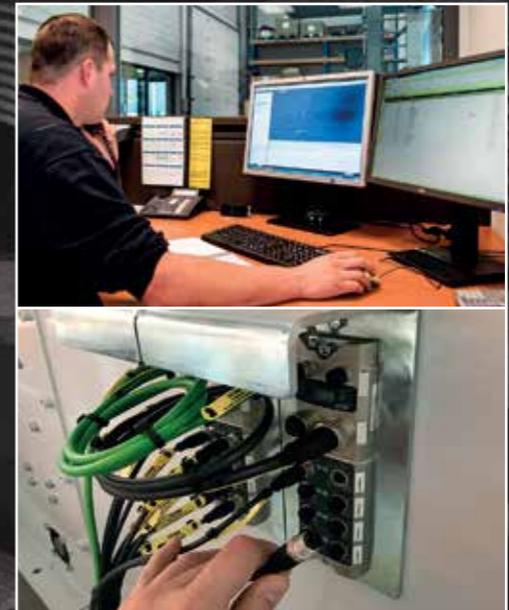
fully automated production



**Clever design**  
**smart in every small part**

# Spare parts Maintenance After sales Responsible partner Teleservice

Willems 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.  
 Willems 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.



**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.



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. For more than 25 years.



# Product range

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

## log shavers

Transport and processing of logs

Our systems for cross- and long-haul transport supply via step feeders the debarker and log shaver.

Log shavers are equipped with advanced interchangeable blade cassette for optimised production.

## bulk handling and storage

Not only the machines, but the entire logistics of production can be delivered by Willems turnkey.

Screens, transportation and storage 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. **Shake screen** separates the product in different roughnesses: A / B / too large parts. **Airscreen** for product-specific applications.

Chain conveyors, infeed systems and redlers  
Horizontal and conductive screws with various

dimensions and capacities, depending on the product.

**Stationary and conveying floor bunkers** or bunkers with screws for storage are being produced to the clients specifications.

## balers

Willems 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, fiber-glass, 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 machines

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

We develop logical software for **intuitive operation** via a touch screen on which complex systems, mechanical processes and movements in the machine are being visualised.

**Online Teleservice Monitoring (OTM)** allows us to analyse machine data remotely. Possible problems can be cured (or even prevented) using our online remedies. OTM is our advanced diagnostic system in which potential malfunctions are defined for all machines. Anywhere in the world.

# Product brochures

## Log shavers

- Tree transport, cross and along
- Singulator, stepfeeder, debarker
- Log shavers



## Bulk handling and storage

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



## Baling equipment

- Balers
- Flatfoil machines
- Lowering machines
- Bundling machines



## Robots

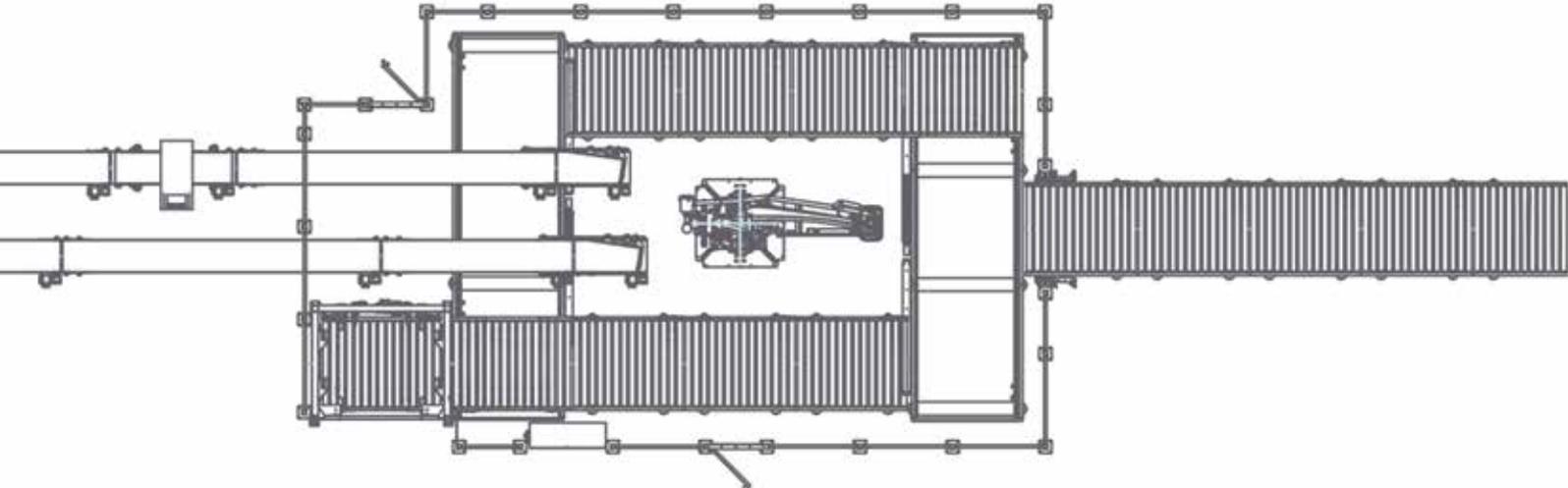
- Robot palletising systems
- Product handling and transport
- Pallet transport



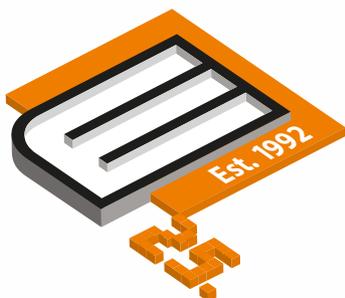
## Pallet packaging machines

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





top quality from The Netherlands



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