



**Log shavers**



# One of our oldest raw materials.

## The unique qualities of wood

Wood has a beautiful appearance and is good to handle. That's why it is often used for the production of cabinets, tables, chairs, doors, floors, et cetera.

But wood has also got insulating qualities and is absorbent which makes wood shavings suitable as soil coverings in chicken stables and horse stables; soft, warm and hygienic for the animals and easy to refresh.

Production forests provide the trees of which lumber is made, and also can be transformed into wood shavings.

Willems supplies machines to handle logs and for the production of wood shavings.



- 02 | 03 Introduction and the unique qualities of wood
- 04 | 05 Index
- 06 | 07 Unique specifications of log handling
- 08 | 09 Log transport systems
- 10 | 11 Log shavers
- 12 | 13 Grinding machine
- 14 | 15 Service & parts
- 16 | 17 Willem's innovations and history
- 18 | 19 Product range



04 |

It seems so simple, to fabricate wood shavings from logs. Still it takes a lot of effort and expertise to make a good quality and consistent wood shaving at a proper capacity. Willem's has all the knowledge to do this. Willem's developed a system, that can make the highest quality wood shavings, at a high capacity in a consistent modus. Willem's offers complete solutions. For feeding the logs into the production line. If required debarking solutions.

Metal detection in order to reject logs that have metal before they are dropped into the log shaving machinery. Sharpening machinery to sharpen the knives.

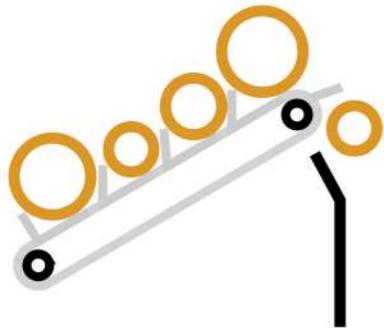
Equipment designed to remove oversized pieces as well as dust and smaller particles from shavings.

Including:

- Automatic sharpening of the knives
- Adjustable thickness of shavings
- Adjustable width of shavings.
- Robust machinery for 24/7 production.



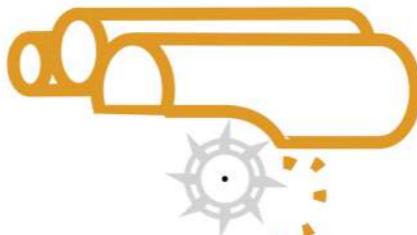
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Variable input

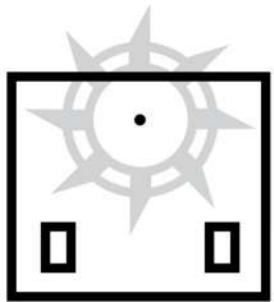


Fast and efficient



Sharp cutterheads save energy  
and provide constant results

## UNIQUE SPECIFICATIONS



Exchangeable cutterhead cassettes  
for fast and save in- and output



Fully automated sharpening  
guarantees sharp knives



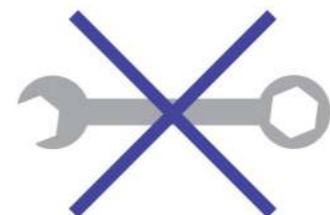
Optimum monitoring via touch screen



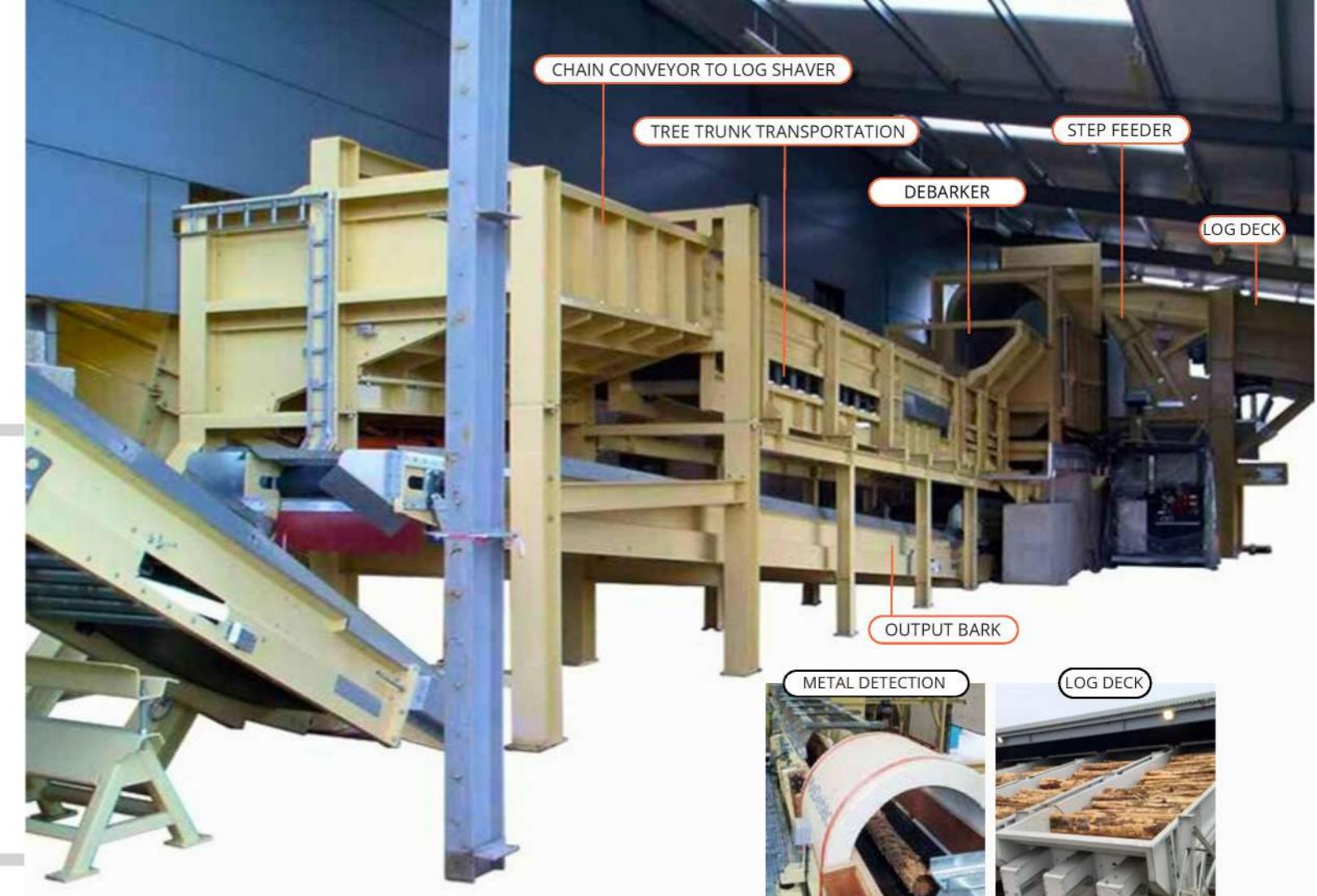
Adjustable size of wood shavings



Long distance service



Minimal maintenance



## Log transport systems



LOG KICKER



SINGULATOR & STEP FEEDER

07



# Log transport systems



Willem's baling equipment developed techniques to transport logs as effectively and efficient as possible. Depending on the customer requirements we can integrate and/or combine different handling systems. All this together creates a complete log infeed system.

## Chain conveyor

- Chain conveyor for buffering and feeding logs.
- With a crane or loader logs can be placed on the chain conveyor for buffering and transporting the logs.

## Step feeder

- Logs will be dosed step by step into the next system.

## Log singulator

- Will singulate the logs so horizontal axial transport is possible.

## Single log chain conveyor (can be equipped with kicker)

- For single axial log transport.

## Single log belt conveyor (can be equipped with kicker)

- For single axial log transport.

We can also integrate additional features like metal detection systems, debarkers (inline or drum), off size separation, inline roller singulators etc.

All this together will guarantee you the best infeed system for your needs.

Check our  
website for further details



# Log shavers

Willem's developed techniques to make an excellent wood shaving. The log shavers can be installed in four capacities; single, double, triple or quattro. With these log shavers, wood shavings can be produced in various sizes; width, length and thickness of the curl can be adjusted as desired. The stationary input bunker allows automatic input, which contributes to better continuity.

A specially developed system with inter-changeable cutterhead cassettes is another plus for better continuity. When the knives are used for a while, the complete cassette can be replaced in a few minutes by another cassette with sharpened knives. Meanwhile, the knives in the replaced cassette are fully automated sharpened and this cutterhead cassette is ready again for optimal shaving work.

This handy carriage helps to replace the interchangeable cassettes quickly and safely.

Log shavers with three capacities:	Input - solid wood - m <sup>3</sup> every hour	Output - oversize + curls + oversize - after drying - tons every hour
<b>WLS-1H-1C</b> -single	7 - 7.5	2.8 - 3
<b>WLS-2H-2C</b> -double	14 - 15	5.6 - 6
<b>WLS-3H-3C</b> -triple	21-22	8.4 - 8.8
<b>WLS-4H-4C</b> -quattro	28-30	11.2-12



# Grinding machine



Advanced cutterhead cassette system  
guarantees a consistent quality and  
excellent continuity.



Willem's developed their own knife sharpening equipment. These machines are so designed that the complete knife cassette can be placed in it. The entire cutterhead will be sharpened without taking any knife out. The machine is easy to operate and works fully automated for the highest precision using servo motors.

Advantages of sharp knives:

- Guarantees the best quality shavings
- Less energy consumption
- Longer lifetime of the knives
- Highest capacity



## 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.

14

15

## 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:



# A family owned business



Since its foundation in 1992, **Willem's** has grown into one of the industry leaders. Nowadays the **Willem's** 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.



## Clever design

smart in every small part

# 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



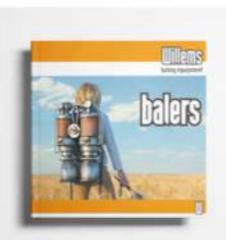
- Log transport system
- Log shavers
- Grinding machines

## bulk handling



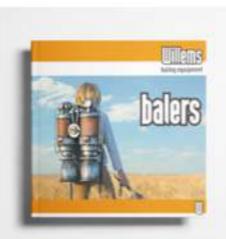
- Stationary and conveying floor bunkers
- Chain conveyors, infeed systems, redlers and air transport
- Screening
- Truck loading- and unloading systems

## 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

