

Renki™

Automatic bedding system
for the modern farm



DEMECA



Renki™ is an automatic bedding system that distributes bedding in the cows' resting areas without manual work. The **Renki™** is programmable and moves along the rail track according to preset cycles. It is suitable for all common bedding materials, such as manure bedding, straw shreds, peat and wood shavings. **Renki™** keeps the resting areas dry and frees up the working hours spent on bedding for other work on the farm.



Fully automatic bedding without manual work



Clean stalls – better animal health



The right amount of bedding in just the right place



Suitable for all common bedding materials



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Benefits

- Fully automatic bedding frees up daily working hours for other work on the farm.
- Consistently clean and dry bedding improves udder and hoof health and milk production. Less mastitis – more milk.
- The animals can remain in their stalls during bedding and continue to rest and produce milk undisturbed.
- **Renki™** moves along the rail track and dispenses bedding evenly, exactly where it is needed.
- With the help of bedding programs, bedding can be efficiently targeted at the areas most used by animals.
- The easy-to-use remote control and browser interface also allow use with a smart device.
- Storing bedding in a silo keeps the bedding hygienic.



Features

- Automatic bedding equipment moving on a rail track.
- Programmable: the ability to create different bedding programs.
- Starting the bedding program at the desired time. The same program can be run several times a day.
- A cow detection sensor detects cows in stalls.
- IP67-rated remote control.
- Easy-to-use browser interface with a Wi-Fi connection.
- Simple and functional automatic control.
- The spring-loaded unloading conveyor prevents the unloading conveyor from clogging.
- Maintenance-free closed battery pack.
- Home station with automatic smart charging.
- Automatic filling station.
- Bedding is supplied from a crushing silo. Alternatively, a separator can feed separated bedding material automatically directly into the **Renki™** unit.
- The hot-dip galvanized rail track can be equipped with rail switches and lifting gates.
- It is possible to integrate two bedding units into the same filling station.



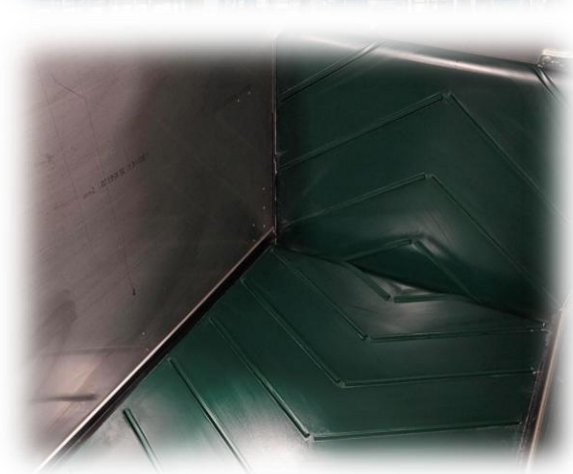
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Operating principle

The **Renki™** bedding system consists of a bedding device that moves on a rail track, a charging station, a filling station and a rail system. In addition to the filling station, **Renki™** needs a crushing bedding silo or a separator to feed the bedding to the filling station. The **Renki™** moves on the rail track and spreads the bedding material according to the programmed settings. The **Renki™** fills the container automatically at the filling station. When the tank is full, **Renki™** automatically continues to run the bedding program. During bedding, the bottom conveyor and unloading conveyor of the device feed the bedding material into the empty stalls in a controlled manner, so that the bedding is evenly distributed at the back of the stalls in the animals' lying area.

Automatic operation

The **Renki™** works automatically according to the schedules defined by the user. Users can create different bedding programs to define travel routes and bedding locations. The same program can be run several times a day. The control system takes care of the movement of the wagon, the dosing of bedding and the execution of the program without the user's constant supervision.



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Charging system

After the bedding program, **Renki™** moves to the home station, where the batteries are charged automatically. If the system has an integrated separator, the batteries are also charged during filling. This allows the system to operate largely without daily user intervention.

Control and user interface

Users can operate the bedding unit using a wireless remote control or through the browser interface on a mobile device. The browser interface can also be used to monitor, for example, the device's battery charge status, event log and fault messages, as well as change settings, routes and schedules.

Monitoring and safety functions

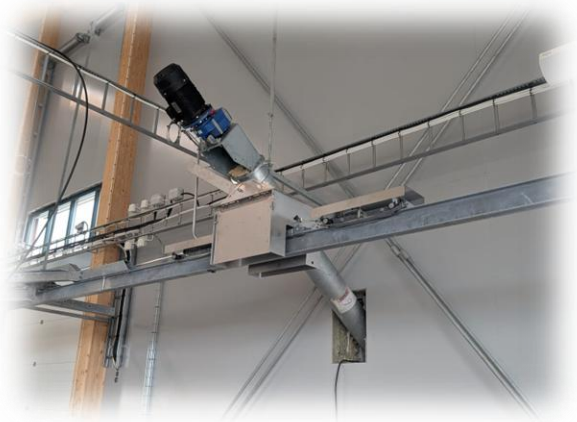
Renki™ monitors motor loads, battery voltage and filling functions, as well as events along its travel route. The system notifies the user of malfunctions with LED indicators and user interface fault codes.



Renki™ Filling System

Crushing silo and screw conveyor

- The volume of the crushing silo is 3.5 m³ as standard.
- Silo extensions increase the capacity to 7.5 m³.
- The silo is particularly suitable for peat, wood shavings and shredded straw.
- The crushing function breaks up clumps, mixes bedding and improves material flow.
- The optional canopy cover protects the bedding from weather and impurities.
- The silo works together with a screw conveyor that transports the bedding to the filling station. The screw conveyor is tailored to the size suitable for the site.
- Automatic load detection detects a load that is causing a blockage.
- Automatic cleaning reduces the need for the user to unclog blockages.
- Intelligent power management draws power from the grid in a controlled manner and prevents unnecessary overcurrent situations and mechanical stress.



Specifications

Bedding capacity	1800 beds/day in a typical robotic barn
Dry matter % of bedding (min.)	32 %
Types of bedding	Peat, wood shavings, shredded straw, separated dry manure
Battery system	AGM 24 V 50 Ah
Unladen weight of the Renki bedding unit	150 kg
Total mass of the Renki bedding device	350 kg
Renki bedding container capacity	0.8 m³
Volume of crushing bedding silo	3.5 m³ (7.5 m³ with silo extensions)
Filling height of crushing bedding silo	2.3 m (3.3 m with silo extensions)

Watch an introductory video of the **Renki™** bedding system!

[Introduction to the Renki bedding system - YouTube](#)



Ask for a quote for the **Renki™** bedding system!



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