

GEA DairyRobot R9500

Uniquely efficient as single or multi box: automated milking at any time



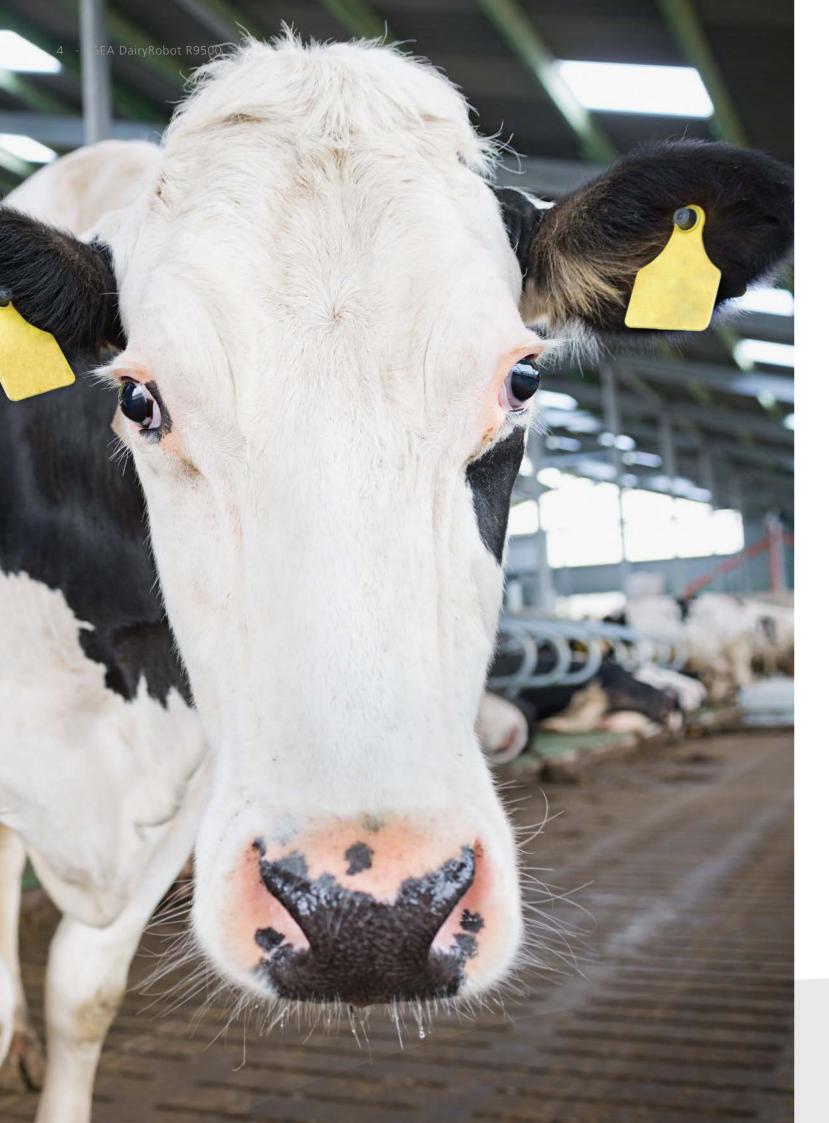


Ideal prospects for milk production

Whether single box or multiple boxes combined as multibox system: your cows decide by themselves, when they want to be milked.

DairyRobot R9500 automatically takes care of premium quality milk and an excellent teat condition. That frees up resources to make your daily planning and routines more flexible and effective. The modern, functional design, large touchscreen display and exemplary ergonomics of DairyRobot R9500 greatly simplify data monitoring, while its manual support features make it especially easy to handle special need cows. DairyRobot R9500 also allows for an individualized approach to maximize your farm's operational efficiency because this exceedingly compact milking box can be seamlessly integrated into your preferred barn design.

- Premium milk quality Optimal milk harvest, superior udder care and impeccable hygiene from teat to tank
- Effective work environment Ergonomic workspace with user-friendly display and navigation
- Non-stop productivity Outstanding system reliability allows efficient cow flow and effective workflows
- Future-proof partnership Top-class, innovative service packages from GEA dealers around the world
- Reliable investment High yield with minimal expenditure of energy, resources and maintenance



Premium milk quality

- Optimal milk harvest
- Superior udder and teat care
- Proactive hygiene management
- Smooth and safe milk transportation





Consistent precision starts in the cup

The milking stall module of DairyRobot R9500 works consistently and indpendently, day or night. Cows are creatures of habit and welcome the standardized, precise milking routine that takes place in the openly designed box. Each step – from teat $\,$ cup attachment to teat stimulation, cleaning or pre-dipping in applicable countries, pre-milking and milking, all the way through to post-dipping – is part of a uniform, quick and comfortable process that takes place in-liner – in one single attachment, for each quarter. The consistent routine, impeccable hygiene and gentle protection within the teat cup are the keys to excellent milk quality!







Perfect teat protection from the beginning: With DairyRobot R9500, complete milking procedures take place "in-liner", inside the teat cup in one single attachment. Teat stimulation begins as soon as the teat cup attaches, gently preparing the udder for milking.







Hygienically safe: Once the teat cup is attached, cleaning or pre-dipping begins depending upon the country-specific regulations, and is followed by drying and fore-stripping. A system of milk sensors immediately begins analysing the milk, looking at conductivity, color, and temperature.





Optimal milk harvest: While milking, the light-weight, suspended MilkRack and milking cluster can easily adapt to the cow's natural movements, exerting no unnecessary leverage on the udder. Additional, patented sensors monitoring the flow from each quarter while measuring milk volume continuously in the flow-through.





Optimal udder care: When the individual quarter finishes milking, the post-dipping process begins. The dipping agent is evenly and economically distributed throughout the fine pores and wrinkles of the teat skin, providing ideal protection against mastitis pathogens. Through automated udder health care, each cow exits the DairyRobot R9500 perfectly protected for the next milking.



Quality control at every udder quarter: cell count sensor DairyMilk M6850

GEA DairyMilk M8650 is the first somatic cell count system in the world to focus on each udder quarter individually during the entire milking process. This early detection system alerts you at the very first sign. That helps you minimize treatment time, safeguard the healing process, and ensure the continuous productivity of your healthy herd. Its' superior monitoring technology gives you key benefits for ultra-efficient animal

management – now and in the future. The innovative somatic cell count sensor is miles ahead of other measuring methods. Based on patented EPT technology, the system analyses milk flow at each udder quarter individually and continuously, giving your GEA automated milking system unmatched efficiency. Above all, the DairyMilk M6850 does not even need resources or reagents. Boost your early detection capabilities to protect the health of your herd and to produce premium milk!



Effective hygiene management

The DairyRobot R9500 keeps the teat cups clean and ready for the next cow. After detachment, the MilkRack immediately swings under the CIP. Here, the teat cups are cleaned externally and disinfected internally using water, peracetic acid and compressed air plus dipping residues are rinsed out. High-grade, safe and effective intermediate disinfection avoids cross-contamination between cows!



Intelligent internal logistics

While the unit conveniently milks your cows for you, the DairyRobot R9500 also tends to the steady flow of perfectly fresh milk. The milk receiver, valves and frequency-controlled pumps in the receiver unit take care of a smooth milk transportation to the bulk tank.



The perfect climate for dairy production

GEA's cooling systems help you to optimize your farm's success through intelligent, sustainable technology in clean, hygienic surroundings. The robot's frequency-controlled pumps transfer your milk steadily and gently to the milk room.

Beyond that, GEA offers a variety of options to create the ideal cooling system to suit your facility's size and needs. From plate coolers to storage tanks and heat recovery – GEA's cooling solutions allow you to design a system as unique and individual as your farm.

And with our buffer and bulk tanks, your valuable milk stays safe and cool until it's time for pick-up. The intelligent ICool tank control reliably cools, agitates and monitors your valuable, high-quality milk while you are waiting for it to be taken away from the farm.



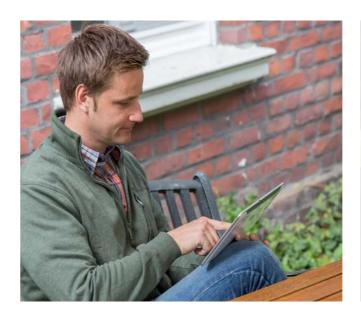


- Cows appreciate the calm, consistent milking routine provided by DairyRobot R9500
- Optimal milk harvest and subsequent post-dipping sustain the long-term health of the entire herd
- GEA cooling systems and the intelligent tank control unit maximize your savings potential and optimize your milk management



Efficient workplace

- Ergonomic workplace and maximum comfort for operator and cow
- Real-time display and user-friendly navigation
- Flexible scheduling of managerial tasks
- Smooth workflows





The appeal of modern-day management

With its innovative functions, GEA's DairyRobot R9500 allows you to design and organize the tasks of daily herd management more efficiently than ever before. Just tap the touch screen to see key production data. Because the Dairy Robot R9500 can be integrated seamlessly into your existing barn design, you can monitor and tend to selected cows quickly and easily. All activities can be quickly completed in a clean and efficient working environment with great technology.

The smart manager's high-tech tool

The GEA DairyRobot R9500 incorporates highly innovative functions on a large touchscreen display. In Live View mode, real-time events can be monitored in easy-to-read graphs. You can also effortlessly switch the control panel to monitor all the key production parameters. The intuitive interface greatly simplifies handling, and the system automatically alerts you to any changes. With such sophisticated software, you can manage your herd better than ever!



Focus on the essentials

With an unobstructed view of each cow and easy access to the udder, the operator can freely intervene in the milking process at any time. A system integrated mechanical milking arm shifts the milking cluster into an ideal position below the cow so each teat cup can attach in a matter of seconds. Kick-proof LED lighting illuminates the cow's udder for full visibility. Your special need cows can be handled more efficiently and comfortably than ever before.







Non-stop productivity

- High system reliability
- Effective workflows and flexible scheduling
- Total transparency of resource usage
- Innovative service packages and minimal downtimes





GEA's philosophy for complete success

You can achieve high throughput by letting your cows decide when to go to the milking robot. Soon after installation, a sense of calm settles over the barn, and cows grow quickly accustomed to a relaxed, rhythmic cycle of feeding, resting and milking. Automated milking frees up time and resources, making daily planning more flexible and routines more effective. Enhanced tools, such as gate control and manual support components, make it especially easy to tend to cows that require special attention. Whether you integrate one milking box or more into your operation, all milking activities can be conveniently controlled from one central milking and management center.

Even more economical as Multibox configuration

GEA DairyRotor R9500 makes it possible: up to three boxes can be connected to one Supply Unit. This way, they share one vacuum pump, compressor, milk and calf milk line and tank connection. The multibox configuration increases the efficiency, reduces the complexity by using less equipment and lowers the usage of water and energy. Also existing installations are now expandable with two additional boxes!

Optimized design, higher throughput

Efficiency gains thanks to numerous design optimizations and a camera system of the newest generation: the new shape of the entrance and exit doors and the reshaped end frame enable an even better positioning of all kind of cows inside the box and a completely undisturbed milking process for the cow. The feeding trough is now hydroformed, has an optimized feed supply and a very clever trough cover concept. This avoids feed losses and reduces the time that the cows stays in the box after milking. Combining all these aspects, your throughput will potentially increase by 4%!

Easy to enter and exit – and provides a perfect fit during milking

The spacious entrance area is designed to lead each cow into an ideal position for attachment. When the gate closes, the preset box length automatically adjusts the feeding trough to accommodate each cow for a perfect and comfortable fit.

After milking, the feed trough swings to the side. At the same time, a divider on the trough moves upwards, preventing access to the feed bowl. Now there is no tasty reason for the cow to stay in the box any longer, so the next one can enter immediately!



MilkRack with high-tech features

Extremely robust and reliable, GEA's MilkRack is also incredibly lightweight. Its ultra-flexible plastic cover keeps the equipment clean, and if the cow kicks, a feedback mechanism enables the mechanical milking arm to maneuver away. The milking arms can be adjusted flexibly or fixed, with no possibility of the teat cups touching the floor. That helps to prevent contamination and provide an optimal environment for clean, hygienic milk production.





Safe and speedy attachment

A G5 Time-of-Flight (TOF) camera on the MilkRack detects the position of the cow's teats to automatically and precisely apply the teat cups on the teats. This TOF principle allows for maximum attachment reliability in a matter of seconds.











Space-saving ingenuity

The compact, space-saving Supply Unit contains all the components that provide the milking robot with cleaning, dipping and disinfection agents as well as water supply and compressed air. It also controls the flow of milk to the filter, buffer tank and bulk tank.

Convenient calf milk management

GEA DairyRobot R9500 makes calf management easy. With just a few clicks, the milk of the cow can be separated and given to her calf, either by bucket or milk taxi. Thanks to the clever system, the herd's offspring are well nourished; getting all the nutrients they need to grow healthy and strong.



No interruption in production

Even while the bulk tank is being emptied and cleaned, there's no interruption to production. The automated milking system simply continues collecting the milk in an interim buffer tank, and the DairyRobot R9500 remains available for use. The cows can maintain their usual rhythm and milk loss will be prevented!



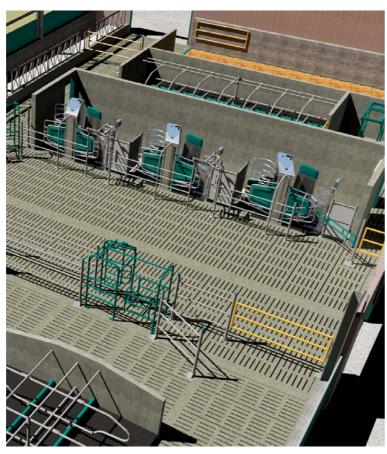
20 · Non-stop productivity 21

The perfect fit for your barn and cow traffic concept

Enhance your barn set-up to make the most of every aspect of all your work routines. DairyRobot R9500 can be integrated seamlessly into your preferred concept. The compact, open module provides spacious comfort for each cow.

For a single box as well as for the multibox configuration the proven Guided Exit concept is available. This concept guides cows to a selection gate after leaving the box from milking. From there the cow can be directed to a separation area for cows with special needs, back to the herd or back to the waiting area. Like this, your daily herd management activities can be accomplished in no time.

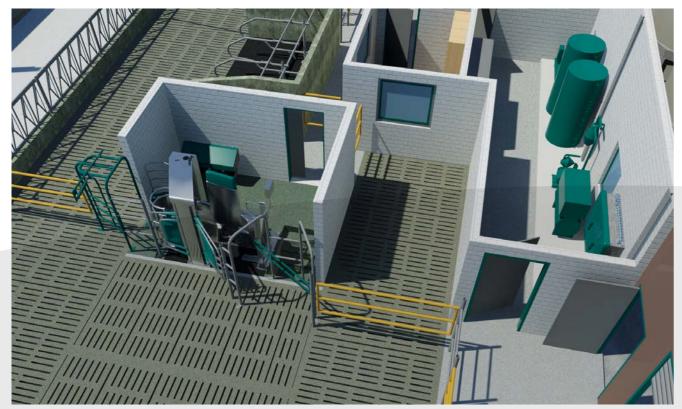
Selective guided cow traffic systems provide clear separation of the housing areas with the help of pre-selection, creating an optimal balance of feeding, resting and milking.

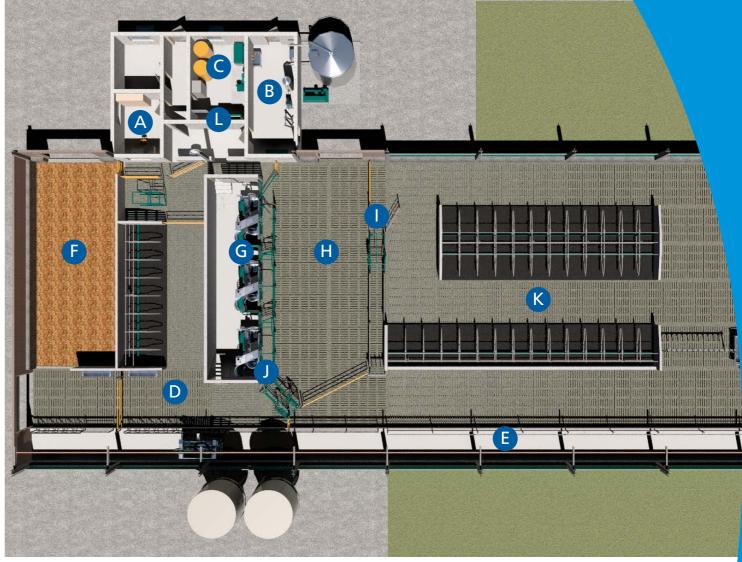


Multibox configuration with Guided Exit

Individual barn planning also enables free cow traffic. In this case, the cows have unrestricted access to the milking system, the feeding table and the freestalls at any time.

Single box configuration with selection after milking





Multibox configuration with Guided Exit

- A Office
- B Milk room
- C Technical equipment room
- D Selection and treatment area
- **E** Feed alley
- F Special need cows / fresh cow area
- **G** DairyRobot R9500 right version, 3 boxes
- H Waiting area
- Pre-selection
- J Selection after milking
- K Barn area
- L Supply Unit



- Economic use of labor creates flexibility
 for daily planning and helps to streamline
- Tools for monitoring and measurement keep you on top of resource consumption, maintaining full transparency at a glance

22 · Future-proof partnershi GEA

Future-proof partnership

- Premium service expertise
- Global network
- Innovative customer care packages and online service





Shared growth and profitability around the world

Our certified GEA dealers work side-by-side with dairy producers around the world, enabling that we as a manufacturer stay close to the industry's growing and changing needs. Our solutions and services are ideally designed to suit individual requirements, often exceeding expectations. We – as your $manufacturer-along\ with\ our\ GEA\ distribution\ partners, work\ hand-in-hand$ with you to achieve profitability and growth together.

Top technology, service-friendly design

24 · Future-proof partnership

When it comes to service and maintenance, the DairyRobot R9500 gives you peace of mind. GEA's robust and proven milking technology allows high performance and very long operating times. Our easy-to-maintain design accommodates direct access to the components during operation. Online diagnostics can be performed to maximize operations, and spare parts can be replaced with short downtimes. GEA provides great conditions for quick, low-cost maintenance to help keeping downtime to a minimum!

Your reliable partner from the outset

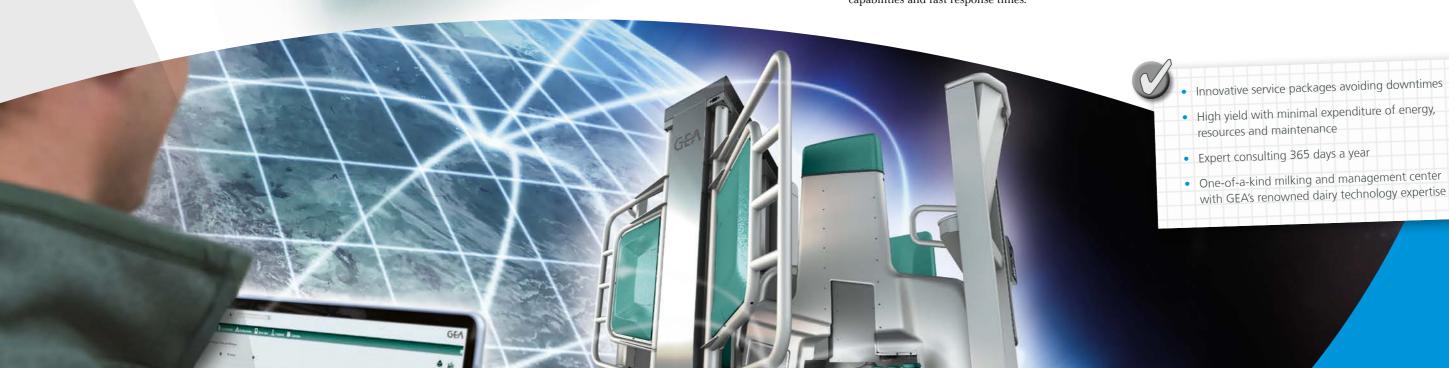
Your decision to use an automated milking system from GEA marks the beginning of a rewarding relationship with GEA as your partner. From the outset you'll experience ideal customer care through our global and nationwide network of certified GEA dealers. A service partner near you advises in all matters of planning, maximizing production processes and herd management, even before installation. When the system is up and running, GEA's highly trained staff provides continuous support through a variety of optional service packages:

- · Quick, competent help at your side
- Regularly scheduled support and maintenance according to your service package
- 24/7 helpdesk
- · Spare parts stock and supply
- Ongoing training of service personnel for consistent knowledge-sharing and a high level of expertise

FarmView

Take advantage of our monitoring software to gain detailed insight into your robot's performance and to receive instant notification of any discrepancies. Combined with a service agreement from your GEA dealer, you'll also benefit from the integrated service calendar that notifies you of scheduled maintenance dates. Log reports record all maintenance work and daily performance characteristics. Potential areas of optimization can be detected remotely and form the basis for developing an improved strategic solution. You'll reap the benefits of utilizing all of your system's capabilities and fast response times.







Notes



We live our values.

Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA Group is a global technology company with multi-billion euro sales operations in more than 50 countries. Founded in 1881 the company is one of the largest providers of innovative equipment and process technology. GEA Group is listed in the STOXX® Europe 600 Index. In addition, the company is included in selected MSCI Global Sustainability Indexes.

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