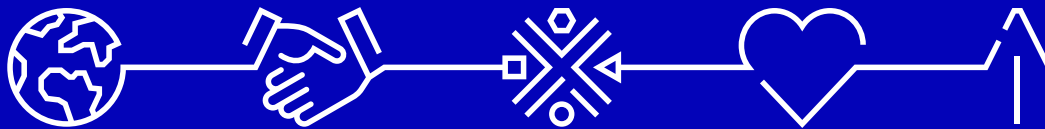


NEXT GENERATION MILKING

Unleashing the potential of modern dairy farming
with sustainable and integrated solutions.



EMBRACE ADVANCED MILKING TECHNOLOGIES WITH GEA



Responsibility

We care for
people and planet.

Integrity

We walk
our talk.

Diversity

We value
our differences.

Passion

We love
what we do.

Excellence

We deliver
outstanding work.

In today's evolving dairy farming landscape, advanced milking technologies are essential for achieving higher efficiency, improved animal welfare, and sustainable practices. Next Generation Milking solutions empower farmers with innovative tools to optimize operations, enhance productivity, and ensure herd well-being.



Watch a short video: Following our values we contribute to a sustainable dairy farming and agricultural sector. We offer you leading solutions for modern dairy farming. Because Next Generation Farming is important to us.

This booklet is your guide to thriving in this new era of milking.

By adopting these state-of-the-art techniques, you can secure the long-term success of your farm.

OUR MILKING VISION

At GEA, we believe in sustainable dairy farming that balances animal welfare, environmental care, social well-being, and economic growth for continuous success. We are on a mission to provide seamless milking systems that ensure safe, gentle, and efficient milking. Our focus is on keeping cows healthy and productive while boosting farm profitability and efficiency.

GEA's Milking Philosophy for modern herds and modern milking



Achieve safe, gentle, quick, and complete milking with GEA's integrated systems and expert support.

GEA Service's triple for
Customer Performance Partnership.



**AVAILABILITY
PRODUCTIVITY
SUSTAINABILITY**

Enabled by digitalization.

OPTIMIZE YOUR MILKING SYSTEM

Achieving the ideal balance for optimal milking

Using factory default settings for your milking system, whether it's automated or conventional milking, doesn't always mean you'll get the best results for your farm.

Trust the "Do It Right From The Start" program from your local dealer: you are investing in a process that optimizes the setup and performance of new or retrofitted installations, including when you are using new liners.

This program offers substantial benefits, ensuring a high-performing system that maximizes throughput, enhances animal comfort, improves udder health, and produces top-quality milk. By implementing this program, you'll also build stronger relationships with your dealer, ensuring long-term success and growth for your dairy farm.

Optimal cow milking is more than just liners!

It's not just about the liner: optimal vacuum settings, pulsation, and detach settings must work together for the best milking results. This complete solution adds value beyond just a single product.

Optimizing your milking system improves milk quality, promotes cow health, and boosts staff performance. It's a continuous process, especially as your herd evolves.

True optimization goes beyond scheduled maintenance, involving detailed analysis and enhancement of the system's functionality to achieve peak performance, covering cow flow, milking time, and udder health.

Understanding system optimization

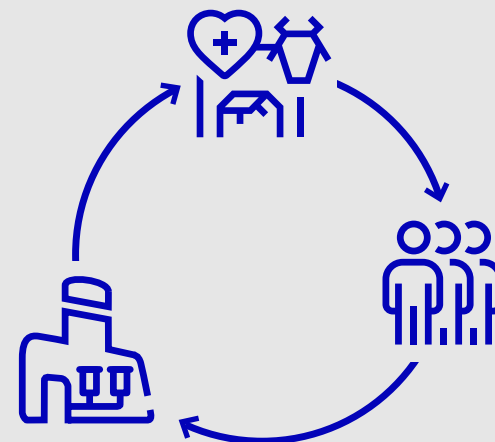
You're already familiar with the importance of maintenance, analysis, and optimization in your milking system. Maintenance involves routine tasks like replacing worn parts. Analysis ensures your system components, such as vacuum and pulsation settings, meet manufacturer recommendations.

Optimization takes it a step further, enhancing your system's overall performance to meet your specific needs. It's about making adjustments to ensure everything works as efficiently and effectively as possible. While perfection might be hard to achieve, our goal is to get as close to it as we can.

Key factors in system optimization

To get the best results from your milking system, consider these three critical areas:

- **Cows** – Ensuring the health and comfort of your cows
- **Staff** – Training and supporting your team for optimal performance
- **Equipment** – Regularly maintaining and fine-tuning your milking equipment



By focusing on these areas, you can achieve the best possible performance and ensure the ongoing success of your dairy farm.

Engaging your team for milking success

Highly successful dairy farms integrate their milkers and parlor crew into goal-setting and execution from day one. [Read more ...](#)

Ensuring equipment performance with expert support

Finally, optimizing your milking system involves a detailed examination of your milking equipment. [Read more ...](#)

Enhancing milking parlor efficiency for greater productivity

Optimizing a milking parlor for higher performance leads to more milk from healthy cows in shorter times. [Read more ...](#)

Maximizing performance and minimizing disruptions

Higher milking performance and proactive maintenance minimize disruptions, maintaining consistent productivity and profitability. [Read more ...](#)

Fostering strong dealer partnerships for farm success

Building a strong relationship with your local dealer fosters a supportive partnership. [Read more ...](#)



OPTIMIZE YOUR MILKING SYSTEM WITH GEA EXPERTS

As GEA Milking Experts, we start by ensuring your milking system is well-maintained and in optimal condition after a comprehensive Service visit. This crucial step sets the foundation for peak performance.

Continuous improvement is key!

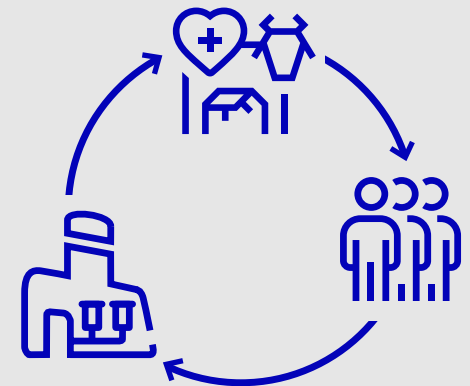
Optimization consultancy should be considered whenever there are significant changes in your cows, staff, or equipment. This includes changes in cow groups, the addition of new cows, hiring new employees, scheduled maintenance,

changes in hoses or milk line slopes, updates to core equipment components, or after regular service. Optimization helps maintain system efficiency and performance.

By enhancing the functionality of your milking system, you can reduce unit on-time, which promotes healthier teat ends and allows cows more time to rest, feed, and hydrate. This not only improves milk quality but also protects your financial bottom line. Ultimately, the primary reason for optimizing your milking system is to ensure the well-being of your cows.

Our optimization process includes:

- **Cow factors** – Assessing cow physiology, environment, and cleanliness to prevent mastitis and ensure healthier cows and higher milk quality.
- **Staff factors** – Improving cow handling techniques, preparation, unit attachment, and staff attitudes to boost efficiency and reduce stress.
- **Equipment factors** – Reviewing milk production and flow rates, pulsation characteristics, vacuum levels, and liner design to ensure equipment operates at peak performance.



By addressing these areas, you achieve a more efficient, productive, and profitable milking system, leading to healthier cows, higher milk quality, and a more satisfied team.

SUPERIOR MILKING PERFORMANCE

Achieving the ideal balance for optimal milking

Using factory default settings for your milking system, whether it's automated or conventional milking, doesn't always mean you'll get the best results for your farm. Trust the "Do It Right From The Start" program from your local dealer: you are investing in a process that optimizes the setup and performance of new or retrofitted installations, including when you are using new liners. This program offers

substantial benefits, ensuring a high-performing system that maximizes throughput, enhances animal comfort, improves udder health, and produces top-quality milk.

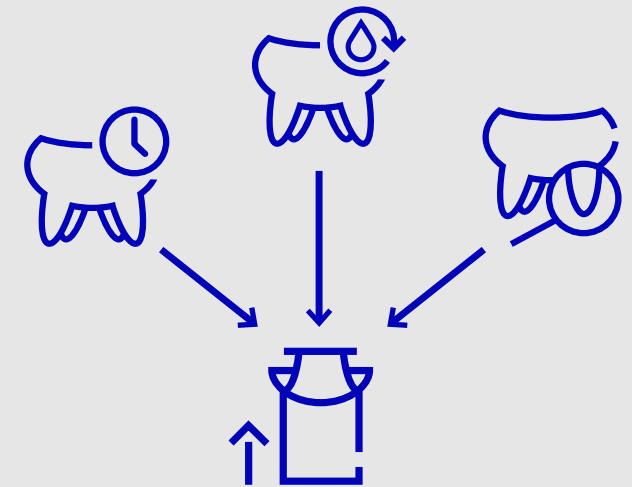
By implementing this program, you'll also build stronger relationships with your dealer, ensuring long-term success and growth for your dairy farm.



Key Factors influencing milking performance

By focusing on these three factors and ensuring regular optimization, you can achieve a milking system that operates at its highest potential:

- **Milking speed** – Influenced by claw vacuum level, pulsation settings and liner compression.
- **Milking completeness** – Determined by proper cow stimulation. This step is crucial to ensure complete milk-out. Operators must always follow a consistent milking routine. Liner types, pulsation settings and teat-end vacuum also influence milking completeness.
- **Teat conditions** – Affected by liner fit and compression, claw vacuum level and pulsation settings.



This not only benefits your cows by improving their health and comfort but also enhances the overall efficiency and productivity of your dairy operation.

Vacuum and pulsation settings

Optimal vacuum settings

Higher, yet stable, efficient and safe vacuum ensures complete milk removal, reducing mastitis risk and improving udder health for happier cows. This translates to higher quality milk and increased profitability. Additionally, optimal vacuum ensures liners work properly, massaging teats to relieve teat congestion caused during the milking phase.



Optimize vacuum for healthier cows, better milk, and more profit.

Mastering pulsation settings

Whether pneumatic or electronic, with or without stimulating pulsator and automatic cluster removal – the pulsation rate and ratio must be correct. Pulsation phases are crucial during milking as they determine the timing of the liners opening and closing. GEA Milking Experts adjust pulsation settings, adhering to the guidelines for rate and ratio, to ensure that pulsation phases B and D are of the recommended length.



Optimal pulsation settings increase milk harvest and ensure better teat condition and udder health.



Detacher settings

Are your detacher settings optimized for best milking performance?

As detachers automatically remove the milking cluster from the cow's udder once the milk flow rate falls below a certain threshold, their settings are crucial. Properly adjusted detacher settings prevent over-milking, which can cause teat-end damage and increase the risk of mastitis, negative-

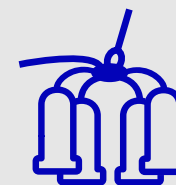
ly impacting udder health and milk quality. They also help to avoid undermilking, ensuring complete milk extraction, which is vital for maintaining milk yield and preventing infections.



When detacher settings are correctly adjusted, they help to:

- **Prevent Over-Milking** – By stopping milking at the right time, detachers reduce the risk of teatend damage and mastitis, ensuring better udder health and higher quality milk.
- **Enhance cow comfort** – Proper detacher settings prevent prolonged milking, keeping cows comfortable and reducing stress. Comfortable cows are healthier and more productive.
- **Improve milking efficiency** – Affected by liner fit and compression, claw vacuum level and pulsation settings.
- **Optimize labor use** – Automated detachers free up labor, enabling your team to focus on other tasks, enhancing operational efficiency and reducing labor costs.
- **Maintain consistent milking routine** – Consistent detacher settings ensure a uniform milking routine, crucial for maintaining regular milk flow and preventing production fluctuations.

To achieve these benefits, detacher settings need regular checks and fine-tuning. Our GEA Milking Experts are available to provide guidance and support, ensuring that your detachers are set correctly for maximum efficiency and according to your herd's specific needs.



Optimal detacher settings ensure complete milk harvest and prevent infections.

Ensuring proper cluster positioning and hose support

Proper cluster positioning and hose support are key to achieving even milk-out and reducing claw slips. Milk should flow freely downhill, when possible, from the cow to the receiver.

Too long milk hoses can affect vacuum stability under the teat and impact how the teat canal opens and the milk flow. Additionally, excessively long hoses create a lever effect on the cluster that negatively affects the udder and even milk-out, pulling the cluster in different directions:



Horizontal forces:

Twist teats, creating uneven milk-out and uncomfortable cows.



Vertical forces:

Result in tension on front or rear quarters due to pulling down on the teats and pressure on the opposite teats as teat-cups are pressed up against the udder.



Rotational forces:

Result in tension on left or right quarters due to pulling down on the teats and pressure on the opposite teats as teat-cups are pressed up against the udder.



For better milking efficiency and cow comfort, always use adequate hose length and cluster support devices.



EFFICIENT MILKING IS KEY

In the past, low touchpoint pressure combined with low vacuum was considered gentle milking. Nowadays, the key factor for gentle milking is to reduce the time the cluster is on the udder without negatively impacting the teats.

The higher touchpoint pressures of most of these liners allow them to be used with a higher milking vacuum. This is particularly appealing to farmers who prioritize efficient yet gentle milking. Spending less time in the milking stall increases animal throughput, enhancing the efficiency and cost-effectiveness of the parlor system.



The GEA Global Liner portfolio offers a wide range of liner sizes to suit every dairy farmers' requirements.

GET TO KNOW THE GEA GLOBAL LINER PORTFOLIO

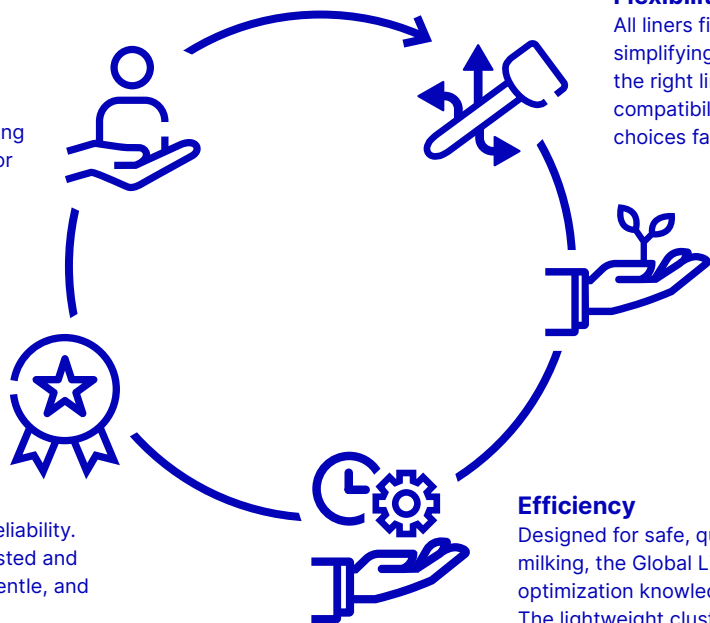
The portfolio offers numerous benefits with its innovative Global Shell and Global Liners providing significant advantages to dairy farmers worldwide.

Ergonomics

The lightweight clusters are easy to handle, and the perfect grip on shells facilitates attaching. This ease of use improves employee satisfaction, making the milking process more enjoyable for staff.

High quality material

The materials used are tested and certified to ensure durability and reliability. Streamlined settings have been tested and proven to guarantee safe, quick, gentle, and complete milking.



Flexibility

All liners fit into the new shell, simplifying the process of finding the right liner for any herd. This compatibility reduces the number of choices farmers need to make.

Sustainability

The portfolio includes long-life silicone liners and durable shells that do not need frequent replacement. Additionally, all packaging is plastic-free, promoting environmental responsibility.

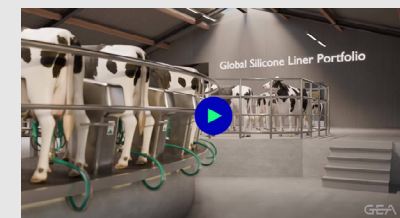
Efficiency

Designed for safe, quick, gentle, and complete milking, the Global Liner Portfolio incorporates optimization knowledge to achieve these goals. The lightweight clusters make attachment easy, and the use of silicone liners means fewer changes are necessary.



Streamlined settings and proper optimization lead to:

- Reduced time in the parlor
- Lower operating costs
- Less labor required
- Lower energy consumption
- Capacity to add more cows
- Happier Operators, resulting in less employee turnover and fewer new hires and trainees



For more information:
see our website

Optimum adaptability for every herd

GEA's new Global Liner portfolio includes liners that fit nearly every herd worldwide. With various sizes and shapes, GEA Farm Technologies ensures a perfect match for almost any herd type. Our conical barrel liners, like the GQ and IQPro liners, offer the flexibility to work with a wide variety of teat sizes and shapes on the same farm. This adaptability is especially beneficial for fast-growing farms with diverse teat characteristics.

Tailored fit with smaller head sizes

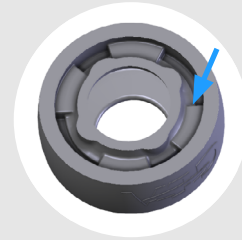
Our Global Liner portfolio includes liners with smaller head sizes, ranging from 51 mm to 58 mm. These liners are perfect for cows with narrow standing or crossed teats. Despite their smaller size, they remain flexible and can adapt to cows with odd-shaped or stepped udders when needed.

Patented positioning bumpers for consistent installation

Our GEA Classic liners feature brand-new patented positioning bumpers at the end of the short milk tube. These four triangles extend beyond the previous end, making the liner longer. They ensure the liner is installed at the correct depth every time, with the thickest part of the short milk tube covering the sharpest point of the claw nipple. This design guarantees a secure and consistent fit.

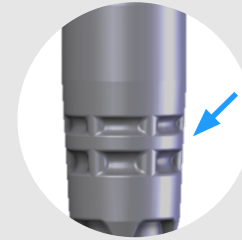
Say goodbye to twisting

Our innovative GEA Global AntiTwist shell and liners are designed to stay securely in place. These features mean less hassle and more reliable performance for you. Here's how:



Strong hold

Four strong ribs keep the liner from twisting, no matter what.



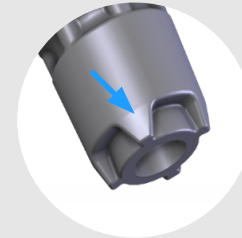
Shut-off recesses

Help reduce the amount of inlet air during attach.



Perfect match

The special design under the liner fits perfectly with the shell, locking it in place.



Positioning bumpers

ensures liners are optimally installed on the claw and the thickest portion of the short milk tube is aligned with the sharpest point of the claw for added durability.



Easy alignment

Visual alignment triangles at the top and bottom ensure the liner is always installed correctly.



Why choose GEA vented liners?

Enhanced milk removal

Short milk tube venting quickly removes milk from the liner, preventing splashes against the teat end, reducing the risk of mastitis and bacterial issues.

Advanced design

Our GEA vented liners have a vent in the short milk tube, ensuring durability and easy cleaning, reducing the chance of vent plugging.

Advantages:

- **Optimal venting** – Close to the teat end for better efficiency.
- **Cleaner air** – Prevents dirty air from touching the teat end.
- **Healthier teats** – No dry or chapped teats from air rushing past.
- **Consistent air influx** – Reliable air flow regardless of teat size.

Meeting standards and recommendations:

- Using vented GEA liners increases the air inlet – up to 22 liters.
- In countries with mandatory ISO standards, for low production and/or high butterfat herds, closing the claw vent may be needed or non-vented liners should be used.
- GEA recommends vented liners over vented claw tops for more points of air inlet and proximity to the teat end.



For best results ask your GEA milking experts to assess the milking system when using vented liners to check vacuum reserve capacity, pulsation and detacher settings.



GEA Global Shell – ergonomic and lightweight design for milker comfort

The next generation in upgraded shell technology for the newest liners in the GEA liner portfolio is here. The extremely durable, fully composite Global Shells are designed to match precisely with the new Global GQ Silicone Liners.



Lighten the load: save tons of lifting per year with GEA clusters!

Cows	Milkings per Days	Milkers	Former cluster weight	Weight new cluster	Weight reduction per day	Weight reduction per year
100	2	1	2.2 kg	1.5 kg	140 kg	51 t
500	3	2	2.2 kg	1.5 kg	525 kg	192 t
5,000	3	4	2.2 kg	1.5 kg	2,625 kg	958 t

Easy-to-clean and durable design for simplified maintenance

The new Global Shell is designed with your convenience and durability in mind. Its smooth, non-slick outer surface ensures that dirt and debris don't cling, making cleaning quick and easy. With minimal engraving and a low-profile design, the Global Shell resists the buildup of unwanted contaminants, keeping your equipment in top condition with less effort.

The Global Shell features a thicker wall compared to previous and competitive composite shells. This design resists ovaling and, according to lab tests, its impact resistance is on par with stainless steel shells. This ensures long-lasting durability and reliable performance.

Designed for maximum comfort and efficiency:

- **Secure grip** – Vertical indents make it easy for milkers, even those with small hands, to hold the shell securely throughout the milking process.
- **Easy handling** – Weighing just 115g, significantly lighter than stainless-steel shells, it provides a more comfortable milking experience for both cows and operators.
- **Perfect grip** – The flared bottom helps keep hands centered, simplifying attachment and installation into the cleaning-in-place (CIP) system.
- **Employee satisfaction** – Operators are happier and more efficient using the new equipment, making the milking process less physically demanding.



Perfect design prioritizes the comfort and well-being of your team, ensuring a smoother and more efficient milking process.

Choose the right liner material

The GEA Global Liner portfolio offers three materials:

- **BfR Rubber:** usable globally except in the US.
- **FDA Rubber:** limited to North America.
- **Silicone:** available in grey and green for almost all markets, recommended for its many benefits.

GEA Dealerships are always ready to help you choose the right material and comply with local regulations.



Silicone liner



Rubber liner

Why silicone liners are the best choice

- **Durability** – Enjoy a longer lifespan with fewer replacements, thanks to their slow aging process.
- **Better hygiene and udder health** – The very smooth surface ensures easier cleaning, minimizing bacterial buildup and promoting excellent udder health.
- **Stress-free milking** – The soft and supple material is gentle on cows, ensuring animal-friendly, stress-free milking.
- **Consistent performance** – Minimal reaction to temperature changes and consistent milking characteristics, regardless of environmental conditions.
- **Flexibility** – Designed to fit a wide range of teat sizes and shapes, providing a perfect fit for your herd.
- **Sustainability** – Longer-lasting liners reduce waste and environmental impact.
- **Longer storage life** – Relatively insensitive to environmental factors, allowing for extended storage periods without degradation.



Switch to silicone liners to boost efficiency, hygiene, and overall performance of your milking system.



AUTOMATED AND CONVENTIONAL MILKING

Insights and strategies

In the world of dairy farming, both automated and conventional milking systems play vital roles. Each approach offers unique advantages, and there is no single solution that is inherently better or worse. Understanding the strengths of each system allows farmers to choose the best fit for their specific needs and goals.



Conventional milking

Elevate your dairy operation with GEA's conventional milking systems

GEA offers dependable milking systems tailored for both small and large herds. Our solutions are designed for consistent performance and high-quality yields, providing a cost-effective way to enhance your dairy farm.

With flexible setups and easy maintenance, GEA systems adapt to various barn layouts, ensuring long-term reliability and efficiency. Upgrade with GEA's conventional milking technology for better performance and animal welfare.

Trust GEA for proven success.

Milking parlors

Customize your milking solution with GEA's DairyParlor line. Whether you need basic equipment or advanced automation integrated with your herd management system, GEA has the perfect fit. Our systems, suitable for barn and pasture set-ups, cater to all herd sizes, ensuring high throughput and productive yields.

- **Animal-friendly design** — promotes better udder health.
- **Optimal cow positioning** — enhances milking efficiency.
- **Gentle milking process** — ensures comfort and productivity.

Milking rotaries

GEA milking rotaries are ideal for both commercial and family farms, supporting various schedules from two daily sessions to 24/7 operations. Designed for durability and flexibility, these systems optimize cow flow and ergonomic handling.

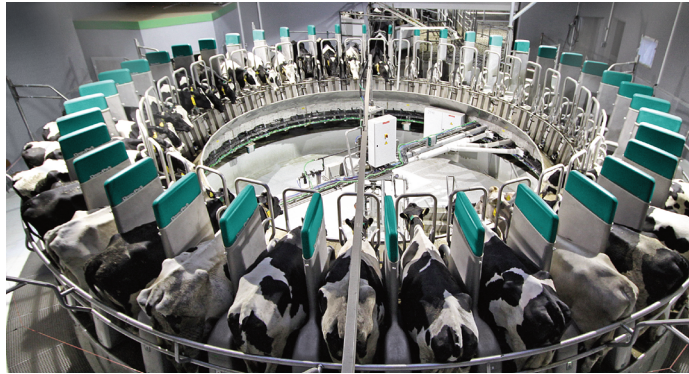
- **Ergonomic design** — For easy handling.
- **Customizable automation** — Tailor to your needs.
- **Optimal cow flow** — Smooth and efficient milking.
- **Energy-efficient components** — Robust performance and longevity.



Automated milking

Transform your dairy farm with GEA's automated milking systems

Enhance milk quality, productivity, and efficiency with GEA's automated milking systems designed for 24/7 operation. Choose from our advanced box systems or automatic milking carousels, trusted by dairy farms worldwide. Discover the GEA DairyRobot line and revolutionize your farm today!



Our automated systems accommodate free, partially guided, or fully guided cow traffic, seamlessly integrating into your farm's operations to enhance productivity and and unleash your farm's full potential.



For more information:
Automatic milking for any herd size.

Efficient milking at its best - GEA automated milking systems

The foundation of all GEA automatic milking solutions, suitable for farms of all sizes, from 30 to over 1,000 cows:

- **DairyRobot R9500 and R9650**
Voluntary milking in single or multi-box setups.
- **DairyProQ Carousel**
Efficient group milking at scheduled times (batch milking).

Trust GEA's reliable, state-of-the-art technology to boost your productivity and efficiency!

GEA experts and dealerships are always here to support you with guidance and solutions for successful dairy farming operations.



DairyRobot R9500. Fits in everywhere.

Whether new barn, retrofit, or modification of an existing milking parlor, plan the robot installation your way. The DairyRobot R9500 is your universal solution that can be integrated almost anywhere. A modular concept that leaves all options open.



For more information:
see our website



DairyRobot R9650. Structured daily routine for farmers and cows.

Our DairyRobot R9650 integrates traditional milking practices with advanced automation, tailored to meet the demands of farms of all sizes - especially for medium herds to large herds.



For more information:
see our website



DairyRobot R9650. The innovative subway design.

Important milking components are placed beneath the robots to improve efficiency, streamline maintenance, and minimize noise. This setup not only creates a quieter, more comfortable barn environment for cows and operators, but also reduces labor requirements, increases productivity, supports animal health, and optimizes your and your team's work-life balance.



For more information:
see our website



DairyProQ. Milking beyond limits.

Discover the future of dairy farming with DairyProQ, GEA's cutting-edge rotary milking system designed for farms of any size. From operations starting with just 600 cows to the world's largest systems handling over 5,000 cows, our technology sets the standard in efficiency and productivity. With DairyProQ, you're equipped to scale up seamlessly and push the boundaries of what's possible in dairy farming.



For more information:
see our website

READY TO SUPPORT YOUR DAIRY FARM'S SUCCESS

At GEA, we understand that every dairy farm is unique. That's why our extensive dealer network ensures that there is always a local dealership close to you, ready to provide the support and expertise you need. Our dedicated dealers are equipped to help you unleash the full potential of your dairy farm, ensuring you achieve the highest standards of efficiency, productivity, and cow welfare.

Whether you are looking to integrate advanced milking technologies, optimize your farm's operations, or simply need expert advice, our dealer network is here to assist you every step of the way. Trust in GEA and our local partners to empower your dairy farming success.

LOCATION SEARCH

DEALER TYPE

PRODUCT CATEGORY

WANT TO FIND A DEALER IN ANOTHER COUNTRY?

Dairy Farming Dealers

The nearest dealers we found for you

GEA is pleased to serve you and across the full range of GEA's automated and conventional systems in the fields of milking, feeding and housing for sustainable dairy farming.

**For more information
and to find your nearest
GEA dealership.**





Contact us



More information
on our website

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