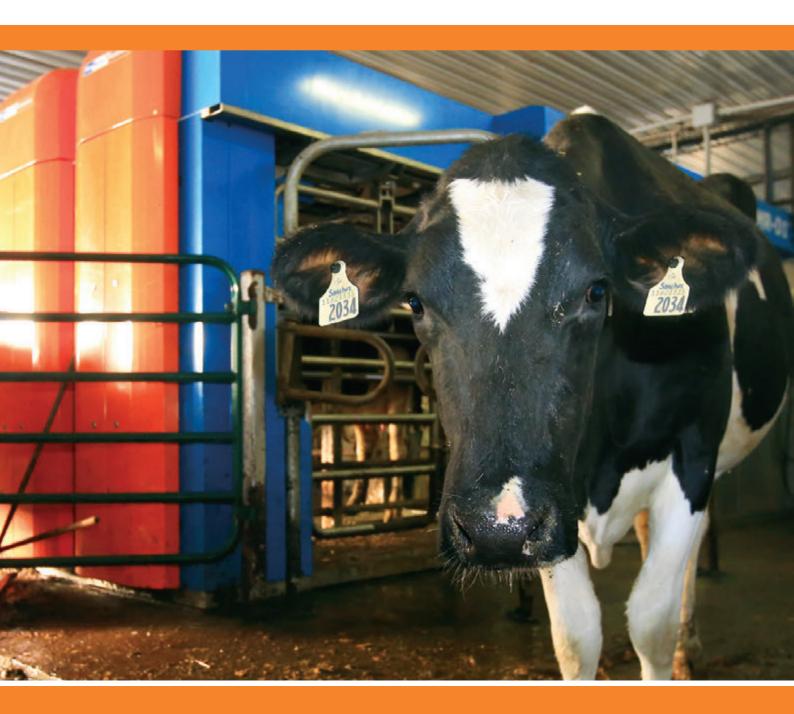




MILKING ROBOTS



THEIR VIEW

VALLEYVILLE FARM

The Frizzell Family enjoys high productivity from their Valleyville Farms operation – a 1600-acre farm near Glen Valley on Prince Edward Island, Canada. In 2014, they installed four BouMatic Robotics milking robots, two MR-D1 double box robots and two MR-S1 single box robots. The units were installed directly into their existing barn with little impact on the overall facility. Once the site was prepared, installing the robots was fast and efficient.

With the installation of the milking robots, the farm has seen increased milk production, reduced stress on the animals and less stress on the owners and employees. The milking robots enclosed control rooms allow the dealer to expedite service calls and give valuable time back to the farmer.

The Frizzell Family - Garth, Cynthia, their sons Chris and Alan – as well as the entire staff of Valleyville Farms point to the flexibility of schedule that comes with the milking robots as a major benefit. It frees them up so they no longer miss family events and personal pursuits beyond the dairy - something they are all grateful for!

Valleyville Farm

GLEN VALLEY, PRINCE EDWARD ISLAND, CANADA

INSTALLED BY

Red Isle Dairy Services Ltd.















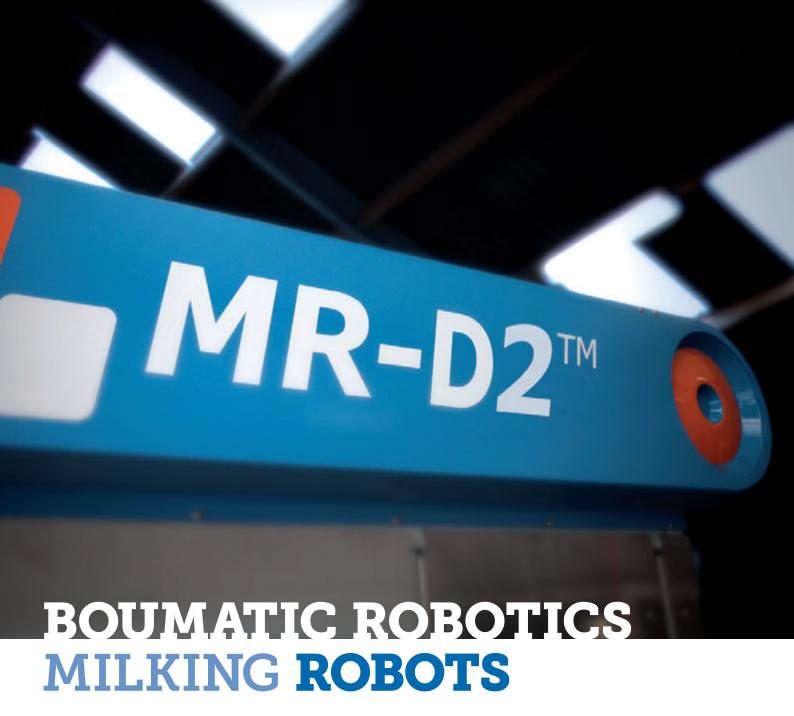
Our View: Winning

BouMatic Robotics has a mission with its products to ensure that the dairy farmer has more to win: more peace in the cowshed, more peace in the family, more time for other things that matter both private and business, but also more peace for body and soul due to less intensive manual effort.

Valleyville Farm in Prince Edward Island is just one of the many farms that shares our vision and who has had success in achieving the lifestyle and business that they desire for their family.



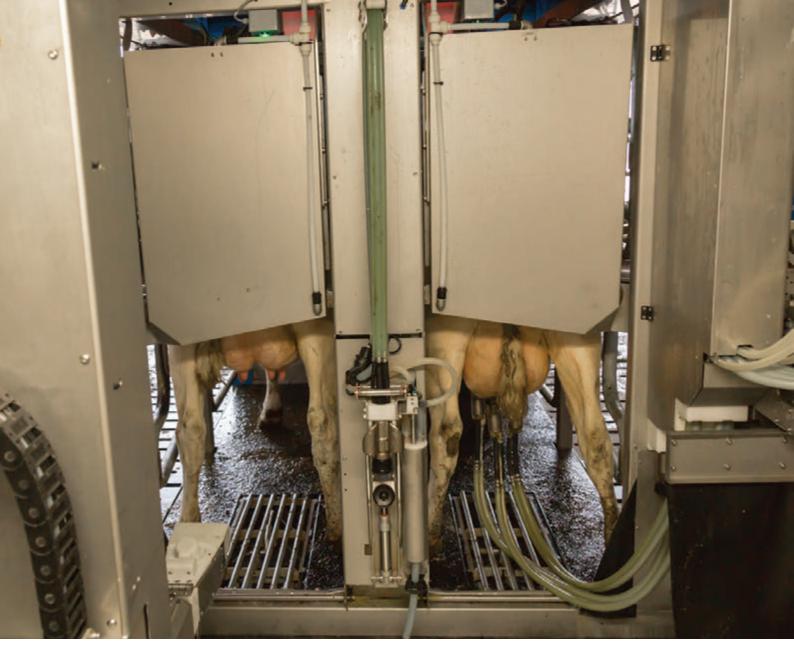




Our milking robot approaches automated milking from a completely different perspective. A cow focused milking machine.

We have many years of experience with milking technology within a compact, durable and reliable system that is easy to operate.





Our View: From Behind

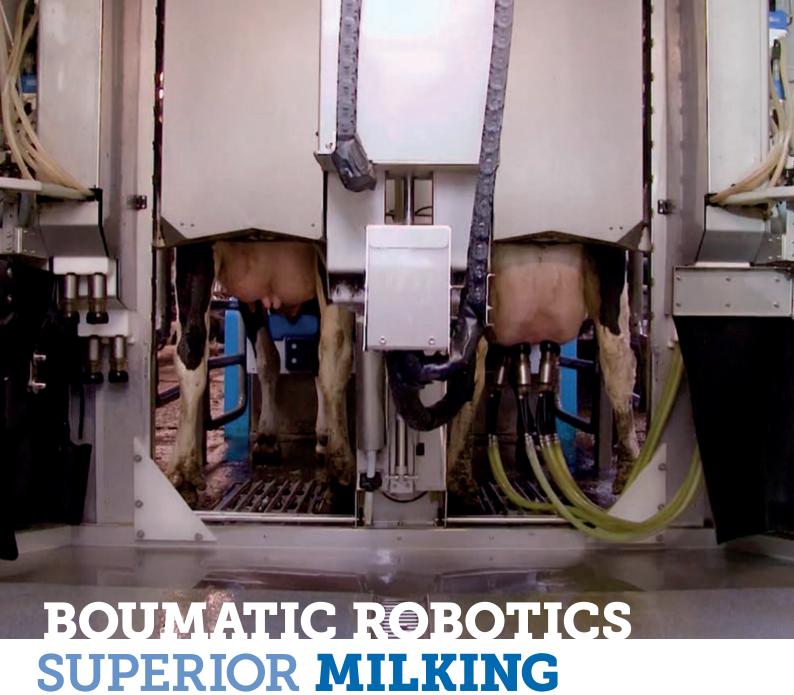
BouMatic Robotics has pioneered and patented a system that milks the cow between the back legs.

This system uses an entirely cow-focused approach to automated milking that provides direct benefits when it comes to milking, animal welfare and protecting the system itself. The cow is relaxed, comfortable and free from the visual distraction of arm movement encouraging her to milk often and fast. The farmer has a safe and convenient way to

manually milk the animals when required. The system is built tough and the rear-milking approach minimizes the cow's ability to kick or step forcefully on vital machine components.

BouMatic Robotics included the gently, quickly and completely milking concepts from sister company, BouMatic to balance technology with the very best practices in milking. Each cow benefits from the industry's leading milking expertise integrated with a forward-thinking machine design.

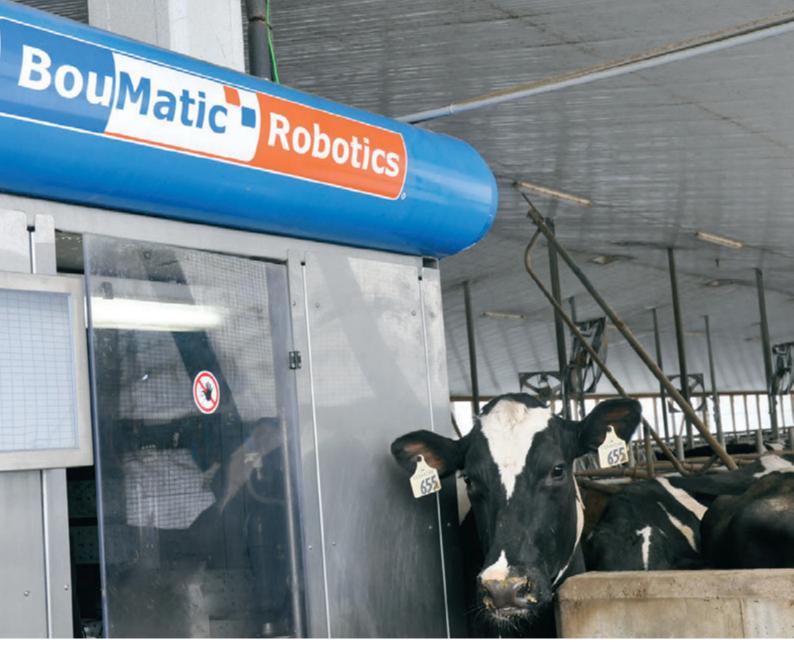




The accuracy within milking robots is critical. Just as the wishes and needs of the end user.

We offer efficient and animal-friendly systems by taking the initiative and accepting the challenge of fulfilling these needs.





Maximum Milkability

Each cow determines her own rhythm. The identification system recognizes the cow, determines whether it is time for it to be milked and then decides how much concentrate it should be given. The robot arm then approaches the udder between the cow's back legs. The latest camera techniques are used to determine where the teats are. Gently, quickly and completely, each teat is individually prepped for milking using a liner in a dedicated pretreatment cup. The entire process is optimally sequenced for teat end cleanliness and milk letdown. When preparation is completed, the milking cups are attached and the milking procedure starts.

The robot arm completes the entire milking process from the enclosed technical area. From washing and pre-milking with the separate pre-treatment beaker (the teats are individually cleaned and pre-milked) to the actual milking process and post-milking teat procedures. The milking process is continuously monitored via the various sensors and measurement devices. Deviations within the milking process are immediately and clearly indicated. When desired, this data can be accessed from a smartphone or tablet.



THEIR **VIEW**



Gaec Le Rocher

LE GRAND-CELLAND, FRANCE

INSTALLED BY

Groupe Lacta-Traite & Lacta-Proflex

MILKING FROM BEHIND CONVINCED US

At Gaec Le Rocher they visited a lot of other robots before they decided to choose for a BouMatic Robotics milking robot. It was mainly the milking between the rear legs that convinced them because they noticed that the cows did a lot less kicking at the robot compared to systems that milk from the side.

After milking for 5 years with a MR-S1 single robot, the dairy farm management decided to install a MR-D1 double box robot because their herd size had increased to more than 60 cows. They choose for the MR-D1 for the following criteria: the robot arm fetching two cups at once, the attaching speed, the proximity of their dealer Lacta-Traite and the cost of maintenance.

"Since then, the work has become really flexible in fact because it's much faster. We've gone from milking twice a day to 2.8, even 3 times. And we're not only producing more milk but better quality milk, and we have a lot less cells," explains Alexandre Serrant of Gaec Le Rocher. "We used to work all of us together every weekend. Now it's one in every two weekends. We're calmer, more serene," he continues.

"And since the milking robot, honestly it's much calmer in the parlour. Herd management and especially activity measurement has also become much easier. I've already recommended it to several people and I'll continue doing so."

Alexandre Serrant, Gaec Le Rocher





Leading Edge Technology

The milking robots are equipped with a dual attachment functionality; an intelligently designed mechanical head that allows the robot arm to fetch two cups at once resulting in efficient arm movement.

The **hydraulic drive for the attachment arm** enables the arm to be very accurate. The **latest PLC technology** is used for these controls.

The milking cups are connected using the very latest camera technology. The waterproof stainless-steel 3D camera has a flat face for easy cleaning.

The time-of-flight technology of the camera can determine the exact position of the individual teats. This has brought our milking robots superior attachment results.

The **vacuum system operation** within the robot provides vital vacuum stability to support harvesting the highest quality milk, gently, quickly and completely.

The latest technology to be added to the robot is the **SmartFlo flow-through milk meter.** The SmartFlo has no restrictions to the milk flow and provides temperature, conductivity data, and milk weight per quarter to the herd management system.

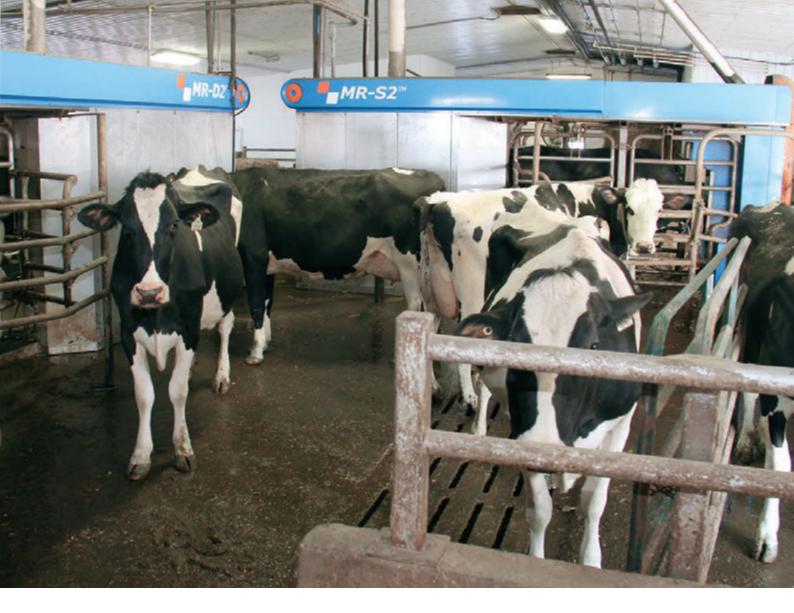




Each cow determines her own rhythm.

Allowing her to optimize her milk production through her entire lactation.





Cow Well-being

The cows feel comfortable and remain calm during the automated milking process. The fact that the robot arm approaches the cow from behind and that milking takes place between the back legs means they are not distracted and experience no stress. The two cows can stand next to one another and look out on the cowshed via the open frame and feel as if they are still with the herd. The cows are provided with concentrated food during the milking process. The combination of these factors, together with the pre-milking process, helps to achieve a smooth and complete milking.

The Cow Tracker is a multi-functional component that works with the robot arm to provide precise arm positioning. It also has spray nozzles incorporated to facilitate cleaning animal waste away from the stall.

SC-Guard[™], Somatic cell count meter

A new option into the MR-S2 and MR-D2 milking robots, is the milk monitoring instrument for Somatic Cell Count (SCC), allowing the farmer to monitor his



cow's health and treat preventively when necessary. The instrument takes a milk sample during the milking itself, which is analyzed for sub-clinical mastitis based on SCC during the earliest stages. This highly sensitive device, allows the farmer to intervene quickly if necessary and monitor the trend and variation in the SCC. Early detection of sub-clinical mastitis followed by the appropriate treatment reduces the risk of contamination and reduces the use and cost of antibiotics. Chances of recovery are increased and loss of milk yield is prevented.

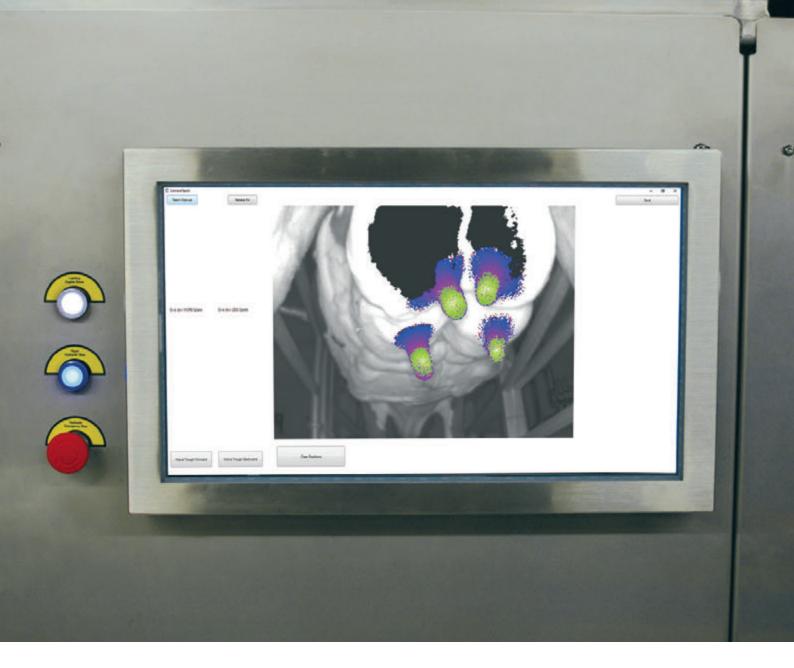




The software technology in the BouMatic Robotics system is extremely user friendly.

There is a wealth of information and functions that a farmer can access and use for making herd management decisions.





User Interface

The user has multiple ways to access and manage information; smartphone, tablet, desktop computer as well as at the milking robot itself. All the important and necessary information the user needs can be accessed via the large, robust touch screen installed on the milking robot. Both the PC and the touch screen are equipped with powerful processors to automate functions and access key data.

Teat Teach Screen

One of the most-loved functions of the interface is the Teat Teach Screen. The camera brings up the image of the udder onto the screen. The operator can simply touch the teat ends on the image to 'teach' the camera where the teats are for that particular cow. This can be done for those cows that have difficult teat placement. The robot will then remember when that cow enters the box again as to the location of her teats and make the attachment process that much more efficient.

"The new 3D camera does a great job attaching and the new teat teach function makes it easy to bring in new cows."

Adam McCarthy, Stoney Springs Farm





Maintenance

The BouMatic Robotics system excels in terms of simplicity and dependability. It is a system that can be relied upon 24/7 and requires very little in maintenance costs.

The user can easily carry out minor maintenance tasks as a result of the technical area's well-organized and very spacious design.

Training

BouMatic has an abundance of cow and milking system knowledge. We pass this along to our dealers through our BouMatic University training programs. We also provide on-farm support with our technical service members who will also guide and train dairymen on best practices.









Robot Hygiene

Following proper Clean-In-Place procedures will deliver the highest quality milk. Milking within any system, whether conventional or robotic, leaves behind fat, protein and mineral residues in the system.

BouMatic has a full line of detergents and sanitizers to accommodate specific water quality and soil load for use in BouMatic Robotics systems.

Animal Hygiene

Gentle on teats, tough on bacteria, BouMatic has pre-dip and post-dips formulated to maintain and protect healthy teat ends.

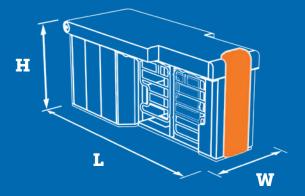












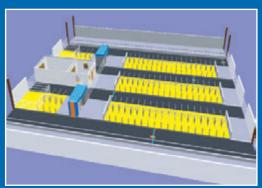
MR-S2

L = 5600 mm / 18.37 ft

W = 2200mm / 7.22ft

H = 2400mm / 7.87ft

M = 2600 Kg



One Unit

The MR-S2 is one, self-contained unit and, as a result, is quick and easy to install. It has an attractive stainless steel design and is built with robustness and durability in mind. Few structural modifications need to be made to the cowshed. Every milking robot is fully tested in the factory and arrives at the location in a 'plug and play' condition.

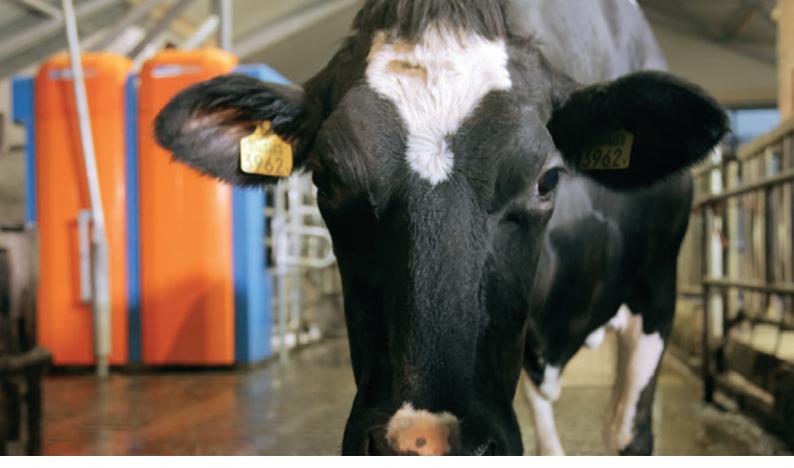
Routing

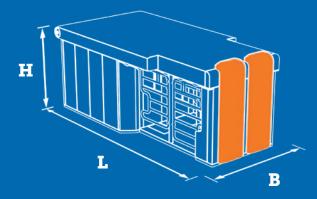
Cow flow is smooth and easy with the MR-S2. The integration of the selection options means that there is no need for extra fencing and gates. The milking robot is equipped with inputs and outputs on both sides, allowing cow selection to take place in the milking station.

The MR-S2 needs very little room in the cowshed. The unique positioning of the technical area means that the paths of the dairy farmer and the cows will not cross.









MR-D2

L = 5900mm / 19.36ft

B = 2800mm / 9.19ft

H = 2400mm / 7.87ft

M = 4000 Kg



One Unit, Two Cows

The MR-D2; a compact milking robot with a double box. The system is set up to milk two cows, standing side by side, simultaneously. The milking robot has a well-organized technical area and one robot arm.

One Unit

The MR-D2 is one, self-contained unit and, as a result, is quick and easy to install. It has an attractive stainless-steel design and is built with robustness and durability in mind. Few structural modifications need to be made to the cowshed. Every milking robot is fully tested in the factory and arrives at the location in a 'plug and play' condition.



THEIR VIEW



Schoorlemmer Dairy HEETEN, NETHERLANDS

Loohuis Melkveehouderijtechniek

BETTER TIME MANAGEMENT AND BETTER HEALTH

In 2014, the Schoorlemmer family chose a milking robot, because their milking parlour had become too small and Jan-Willem Schoorlemmer was suffering with a back problem. What's more, his wife had a cow allergy. They chose two MR-S1 milking robots from BouMatic Robotics because of the good selection possibilities and the milking between the hind legs. And the robots could be perfectly and simply installed in their existing barn.

Now that Jan-Willem Schoorlemmer has milking robots, the way he spends his time, both on the farm and in his private life, has changed significantly. On his farm, he now spends more time among his cows and he can pay closer attention to his problem cows. In his private life, he can be much more flexible for his family and enjoy his spare time. Since the physical labour has declined, his back problems have also disappeared.

Jan-Willem Schoorlemmer has also seen that his cows are much calmer. They enjoy their freedom and decide their own day rhythm. Thanks to this, the milk production has risen to 3 milkings per day, while preserving the very good milk quality.

"We have been milking with this milking robot for four years now. If we had to choose again, we would certainly choose the same system."

Jan-Willem Schoorlemmer





Compact

The operating area for the milking robot is entirely enclosed and equipped with a ventilation system. As a result, the milking robot can fulfill all the requirements from both the government and milk companies. The organized and very spacious design of the technical area means all the components can be located with ease.

Retrofit-friendly

Because there are few remodeling requirements, this milking robot is ideally suited for updating older cowsheds with the latest in milking technology. There are several cowshed layouts to choose from that offer the best situation for optimal cow flow to and from the milking robot.



THEIR **VIEW**



Stoney Springs Farm

APPLETON, WISCONSIN, USA

INSTALLED BY LDS Inc.

STONEY SPRINGS FARM

Stoney Springs Farm is a 5th generation family farm located in Appleton, WI. In the early 80's David purchased the farm from his father and then in 2000, Adam and his wife Marie purchased the dairy from David. A freestall barn and parlor were built and they increased their herd size to 240 cows.

In October of 2015, Stoney Springs Farm shut down their parlor and began milking in two MR-D2 milking robots. The two BouMatic MR-D2 milking robots easily fit into their existing freestall barn layout, which has slatted floors.

The MR-D2's has a positive impact on their daily lives but more importantly on cow health. Their cows are up in milk production and their somatic cell count is down. In addition to the MR-D2 milking robots, Stoney Springs Farm utilizes BouMatic's RealTime+ Heat Detection System. Since incorporating the system, their breeding program has seen a tremendous increase. They currently have a 40% pregnancy rate.

"Since we put in our BouMatic Robotic milking robots, our production and cow health has greatly improved."

Adam McCarthy





Meticulous Production Process

BouMatic Robotics' products are developed, produced and maintained entirely in-house. The fact that BouMatic Robotics does everything itself means that work processes can be flexible and top quality is always guaranteed. The diverse systems are constructed and assembled in the company's factory in Emmeloord, in the center of the Netherlands. A team of professionals works meticulously on the manufacture of the robots at this location.

The BouMatic Robotics' standard system means quality is guaranteed and the customer can be sure of a perfectly functioning end-product.



About the Company

BouMatic Robotics B.V. is a dynamic, Dutch company that focuses on automation on the dairy farm. Years of experience gained by sister-company BouMatic has enabled BouMatic Robotics to integrate a series of modern milking robots that are used in the dairy sector across the globe. The emphasis in this context is always placed on the balance between man, cow and technology.

Revolutionary Vision

Technology is constantly moving forward. As are the wishes and needs of the end-user. By taking the initiative and embracing challenges, we can provide systems that are more efficient, more profitable and more animal-friendly.

BouMatic Robotics employs a team of enthusiastic roboengineers and scientific researchers with a passion for milking and automation. This department is constantly on the lookout for product developments. In practice, this translates into numerous concrete benefits for the end-user.



Dealers and Service

The company has a worldwide network of dealers. With this, BouMatic Robotics can offer its customers the expertise and experience of a multinational with the benefits of having a local expert in the immediate vicinity.



Special training is provided for every purchase and in the event of a problem, a team of certified service engineers are ready to help 24/7.

Dealer:

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