



# milking parlours

SUPPLEMENT

International  
**Dairy  
Topics**

# First Covid-19 remote parlour installation worldwide

Milkline NG S.p.A., Italy

Milkline NG is very proud to have carried out their first remote installation on the other side of the world, in the middle of the Covid-19 pandemic. It was a great job with wonderful worldwide co-operation and support involving Italy, Bulgaria, Thailand, and Israel. It was a great adventure.

Milkline NG S.p.A. is a world-leading manufacturer of milking systems. With the precious collaboration of its dealer in Thailand, 108 Agriculture Machine And Equipment Co Ltd, they prepared a Parallel 20+20 Milking parlour with ED200 Milpro 350 and Dataflow II herd management system.

In September 2020 Thailand's travel ban for commercial flights was still in force, but both companies entered into contact with the related Embassy and General Consulates to prepare the list of documents for their technicians, to organise the installation.

Milkline NG established an online video and voice connection 24/7 between the Thailand and Milkline installation teams.

From Thailand, Milkline requested the following preparations:

- An English-speaking person in charge of installation.
- Four fixed cameras installed in the four corners of the parlour.
- One movable camera that can be moved to a specific requested position.
- The possibility to connect online to these five cameras.

The Milkline installation team monitored in real-time the installation process and the technicians were available 24/7 to give real-time instructions and advice to support and guide their partner in Thailand step by step.

During the whole installation, 108AME Celikel Thailand had a person in charge of the translation, from the start until the end of the installation. 108AME Celikel Thailand got all of the cameras up and ready and a daily



briefing call for daily tasks to be faced was planned. All these efforts were supported by their partner in Israel with whom they shared the camera access and sent daily reports via email with daily steps completed for this Covid-19 style installation.

The milking parlour installed was a full hot deep galvanised frame 20+20 with a 90-degree suspended frame for optimal visibility and access to the animal's udders providing further space for easier milking operation. It is the preferred option for farmers who have a high number of animals.

The vacuum system is equipped with three vacuum units HPUI60L Triphasic Motor kW 4, capacity of 1600L/min at 50kPa with hot galvanised 100L vacuum tank and vacuum servo-regulator.

The washing process is secured by the Clean-O-Tronic controller where you can choose complete or partial cleaning cycles and pre-milking sanitisation if necessary. The temperature is always displayed, and the detergent dosage is automatic to guarantee precision and no waste of chemicals.

The milking system consists of the ED200 control system of individual milking points which ensures advanced milking thanks to special features such as automatic stimulation and dynamic pulsation based on milk flow. It provides real time information about the milking process (for example, milk yield, milk flow and milking time, as well as alarms and notifications).

All the milking operations are managed by a single multifunction pushbutton, ensuring a simple, efficient, and error-free milking routine. All the parameters of the milking cycle can be configured (ratio and pulsation frequency, group removal, advanced functions) with a mobile phone.

The integration with the DataFlow II herd management software allows real-time management of the herd and of the single animal directly from a PC. Moreover, all the data are stored in the cloud and you can access this at any time and from anywhere on the farm thanks to the HealthyCow24 (HC24) app, using a mobile device or the web application.

Included in the system there is the Data Terminal, a touchscreen terminal that is installed in the milking parlour. This important tool allows operators to interact with the system and enter data and events in real time, and also to check the alarms on specific cows directly from the milking parlour.

The Milkline Dataflow II Herd Management System is a complete, integrated, real-time, cow monitoring and milking management solution. Producers can configure their Milkline milking parlour in 3D on the website. ■

[milkline.com/en/3d-configurator](http://milkline.com/en/3d-configurator)

# Automated milking puts Dutch dairy farm ahead

GEA Farm Technologies, Germany

Alida Meering and Jan Hendrik Deiman can look back on a very successful year of milk production, which the couple attribute above all to the switch to an automated milking system. For over a year now, their 220 dairy cows have been milked by four GEA DairyRobot R9500 milking boxes in their newly built and fully automated freestall barn. With the generational change at Deiman's family farm, the wish arose to increase efficiency, and at the same time improve animal well-being and make milk production more sustainable.

"In 2017, we started with the preparations for building the new freestall barn," Alida Meering, told International Dairy Topics. "We had to move the barn and several feed silos, however the extensive construction measures have definitely been worth it for us." The conversion of the dairy farm located on the outskirts of the town of Stadskanaal in the Groningen province of the Netherlands also proved advantageous in terms of economising work effort. For 20 years, use of a rotary milking parlour had tethered staff to morning and evening milking times. Thanks to GEA's automated milking system, a self-driving feeding system and cleaning robots, the new freestall barn can be run by a single worker.

Alongside the four GEA milking robots, the impressive size of the modern building catches the eye. Open-design side walls allow light and air to flow in as needed with the help of curtains. Neither too warm and nor too cold, an ideal atmosphere of well-being is created for the dairy cows. The wide walkways offer extra space to move freely. "Since February 2020, we have been milking with the four milking robots. We especially like how compact they are," Alida added. The four milking boxes are connected to one central supply unit, so they can be run particularly cost-effectively and energy-efficiently.

What fascinates Alida about GEA's milking robot is the gentle milking procedure at low vacuum levels and the unique In-Liner Everything technology: "Udder health has improved significantly since we started milking our cows with the DairyRobot R9500. The somatic cell count is at 100,000, which is an excellent result." Every step, from udder stimulation, cleaning teats and pre-milking all the way to gentle and complete milking as well as dipping takes place on the quarter level, swiftly and hygienically in the protected teat cup. The dipping procedure moistens the teat's skin with a protective shield and protects the teat canal from bacteria and germs in the barn.



Aside from excellent milk quality, the DairyRobot R9500 delivers a precise picture of every udder quarter of every cow. Deviating values in milk quantity, conductivity or temperature can point to an emerging udder infection and are included on the list of milk alarms. Alida uses the precise notifications for efficient cow health management. Early examination and treatment can bring a diseased cow back to a healthy performance level and prevent milk losses. "We have a large straw area for sick and weak cows. Thanks to the milking pit and the possibility to attach manually, cows with special needs can be conveniently treated directly in the milking box," she explains. In addition to herd management with GEA DairyPlan, the milk farmers also get support in animal observation from GEA CowScout. The monitoring system analyses eating, lying or walking behaviour around the clock. Cows needing attention can be examined immediately or can be made available on time for insemination.

The couple also turned to GEA to equip the barn. For the natural rhythm of eating, lying and milking, the GEA One Way Finger Gates keep dairy cows on the right track. GEA DairyBarn B3130 flexible cubicles offer considerable additional animal comfort. Without confining, they provide cows with security and freedom to move when entering and leaving the box. A comfortable Akwatopsoft mattress system invites the cows to lie down and offers a high degree of hygiene in cubicle beds. The longer time spent there also supports blood circulation and rumination activity, which in turn promotes milk yield.

The dairy farm's first year balance sheet is more than encouraging: "With the extra space in the new barn and the effect of more frequent milking with GEA's milking robots, milk production has risen significantly in the last year. The average performance of our cows is at around 10,450 litres per cow per year. We are very satisfied," Jan told us proudly.

The helpful support from GEA's specialised dealers also has a positive effect on the cheesemaking side of the business. As Alida explains, "I use a small amount of the milk to produce unpasteurised cheese for selling it directly from our farm. In addition, I produce yoghurt, kefir, pudding and chocolate milk for which I take the milk directly from the milk line behind the filter. This was done for me by the dealer's service technician, actively supporting me in developing my cheese business. It's great that there is such a wide range of knowledge available at the GEA dealership. The dealer makes the brand. And the technicians make the dealer. I think that's an important part of GEA's strength."

[gea.com](http://gea.com)



# Fast, efficient milking with one man operation

DeLaval, UK

The expertise DeLaval has gained designing, manufacturing and monitoring the performance of the highest throughput dairy systems around the world have been applied to the latest generation of rotary systems.

The new DeLaval Rotaries E100 and E300 are developed to help the farmers to do more, with less. They are not just rotary platforms but full systems with more information, more automation, more functions and more technology than DeLaval have ever offered before – and they deliver it so that one person can operate everything safely, comfortably and easily, from a central point.

The focus on efficiency and throughput means that whichever DeLaval rotary is the best for the particular farm, it will help to manage each farm's challenges: animal welfare, work efficiency, milk quality and, ultimately, the profitability.

The Godel family produce milk for Gruyère AOP in Ecublens in Switzerland. They wanted to milk their high producing 90 red Holstein cows quickly and efficiently. The Godel brothers studied different possibilities and on their visit to a new DeLaval Rotary E100 in Ireland they were convinced that due to the unique FastLane entry/exit area design and the low profile ComfortBail on the platform, the cows get into milking position immediately after entry and the milker can start the milking routines quickly. They decided on a 28 bails E100 rotary. Their one milker works in a comfortably designed cockpit area, where the rotary controller and the interactive herd management touchscreen is within reach. They are able to milk the 90 cows in 45 minutes since the ODTs On-Deck Teat Spray system disinfects the teats automatically before the cows leave the platform.

Peter Farrel in Tipperary, Ireland has a grassland spring calving dairy farm. He is milking his 250 cows on a new 50 bails E100 rotary system and he is very satisfied with the performance. "The reason we decided to change our milking parlour from our old herringbone parlour to the new DeLaval Rotary was that it was just taking forever to milk the cows in the old parlour. I was always milking cows. Since we got the new parlour we just don't know ourselves. Milking time is down over 50%. The parlour runs smoothly. We can comfortably do 250 cows an hour," Peter said.



One milker operation would not be possible without the automatic teat spray robot DeLaval TSR. "Over on the far side end we have the TSR that sprays the cows. It is the man that never fails to turn up. He is so reliable now we don't even look over. He's just there, he's always there. He's never late, he's standing there ready to go. All you do is turn him on," added Peter.

The high performance, efficiency and short milking times of their new E100 rotary milking system has truly transformed the life of the Farrell family. "One of the other benefits from installing the new rotary is the amount of time it has freed up. It really, really benefits family life."

In Wangerland, Germany, young farmer Jan Philip Doden is running the family farm. In 2018 the Doden family built new facilities and increased the herd within the last two years to 650 cows, milking more than 13,000kg/cow per year. The heart of the new dairy system is the new DeLaval Rotary E300.

"The cows love the rotary," explains Jan. "They like to enter it and especially the heifers enter the platform directly in the first few days. They are very relaxed during milking. Because of the FastBail and the 1.5 entrance of the rotary the cows are able to enter the platform really well."

The FastExit with the 15 degree FastBail design ensures that the cows can leave the platform quickly. The exit bow guides the cows out from the platform, which increases the throughput of the rotary. The cows are very relaxed and behave much better in the herd.

Jan is very satisfied that the new rotary system contributes to the improved udder health. "At the end of milking the udders are sprayed by the Teat Spray Robot. In addition, the cluster is flushed with air, water and acetic acid by the Air Wash system. Because of the automatic disinfection and spraying by the TSR robot, we have seen an improvement in udder health." This combination allows the SCC to be kept at a stable herd-level of around 150,000 cells/ml.

Due to the complete package of milking system, DeLaval DelPro Farm Management and the advisory services provided by DeLaval, Jan can invest more time on health monitoring and managing the herd. As he summarises: "We finally chose DeLaval because, beside all the new and well proven features delivered with the rotary system, they could offer a complete package with service and herd management. Those are the reasons why I can recommend this milking rotary."

[delaval.com](http://delaval.com)



# Milk more cows in less time with less labour

## Dairymaster, Ireland

The aim of any milking facility is to have all cows milked and the parlour cleaned in 90 minutes, anything after this the operator's concentration levels will decrease. Farmers with 180 cows or more are now looking to Dairymaster for a more cost-effective solution. The Dairymaster rotary allows them to milk more cows, in less time with less labour. Attaining a good work-life balance has become more of a priority for the modern, progressive dairy farmer and the desire to install a Dairymaster rotary has grown significantly.

Some of the biggest advantages of a Dairymaster rotary include:

- Throughput is exceptionally good.
- Operator and cow comfort.
- More time for other farm jobs.
- Less labour unit required.
- Great work-life balance.
- Excellent parlour design and plans.
- Heavy duty, built to last.
- Excellent milking characteristics.
- Excellent cluster alignment.
- Divert milk at the touch of a button.
- Information at your fingertips.
- Low maintenance.
- Easy cleaning.
- First class service.

The rotary solution allows the dairy farm to steadily increase in herd size into the future without the need for further investment. The Dairymaster rotary can be designed to suit all budgets where more advanced features can be added later:

- **Swiftflo Performance:** Suitable for entry level farms with little automation.
- **Swiftflo Optimum:** Suitable for typical family farms with some automation.
- **Swiftflo Endurance:** Suitable for large scale farms with full automation.

## Trusted by farmers worldwide

Dairymaster have rotary installations all over the world, including Ireland, Germany, The Netherlands, USA, France, Ukraine, Russia, Middle East, and China. These farms are experiencing all the benefits of milking 'the Dairymaster way'. With the overwhelming benefits of a Dairymaster rotary parlour, it is easy to see why it is such an attractive way of milking, not only for this generation but also for the next generation of young farmers, securing future investment to producing milk efficiently.

## Plan what is right for your farm

Take the time to walk your farm with a 'fresh outlook'. There is a whole lot more to designing a parlour than one would initially think. Are you planning to build in an existing building, or is it a greenfield site? It is also important to future proof your plans for your new parlour and consider the following questions:

- What will your herd look like in 10 years' time?
- Do you plan on purchasing more cows?
- Will the next generation be taking over?
- Any land restrictions to limit the number of cows you have in the future?



Dairymaster's professional and experienced design team go through each of the following in detail in order to design the milking facility that best suits your specific needs. The team look at:

- Designing for the cow.
- Designing for the operator.
- Layout of the buildings and site.
- Parlour requirements.
- Air flow.
- Accessibility.
- Biosecurity.
- Existing buildings.
- Energy efficiency.
- Automation requirements.

One of the most important tasks you can do when purchasing a new rotary milking parlour is to take the time to visit farms with all makes of parlours in each of them. This will allow you to see for yourself the throughput, cow flow, cluster alignment, operator comfort, and intelligent technology in action, such as diversion line, Swiftflo Commander, ClusterCleanse, automatic teat sprayer and much more. It can be a time-consuming task, but it will be worthwhile and will make your decision much easier.

## Meeting your needs in every aspect of the investment

The unique Dairymaster design results in extremely low power consumption to rotate the platform. The patented Rotaglide suspension system facilitates the smooth rotating movement of plant during milking. The system improves load transfer from the rotary platform to the support structure, meaning reduced wear on the track, resulting in less maintenance and better reliability. It is vigorously endurance tested for longer life and is proven on farms with 24x7 operation. One of the key factors of Dairymaster's growth is that a good aftercare service is available. The Dairymaster Technical and Service Team have been trained to the highest possible standards. Support is available with their Global Technical Team 24x7x365 and when you ring for assistance you get to speak to a real person who can understand your situation and give you the best possible solution.

## Built to last

When researching rotary parlours, be sure to compare like with like. Build quality is very important when making a choice for the next 20+ years. The entire range of Dairymaster rotary parlours are of a very sound structure with strength where it matters, meaning it is built to last. This is evident when you look at rotary parlours installed by Dairymaster worldwide. You too can 'experience the difference'.

[dairymaster.com](http://dairymaster.com)



# Rotary system designed for maximum performance

BouMatic, USA

Ebert Enterprises LLC operates with 3,500 adult cows and 3,500 heifers. They had been milking in two parlours; a Double 26 parallel and a Double 8 for the cows that needed closer attention after freshening. In 2016, they started milking with an 80-stall BouMatic Xcalibur 360EX external rotary parlour.

They are working 6,500 acres of cropland with 20% double-cropped each season. A few interesting aspects about Ebert Enterprises LLC include their ability to feed high-forage rations due to the land base, and the double cropping gives them opportunity to plant alternative forages like sorghum and peas and oats.

With the updated milking facility they have been able to minimise the cow's milking time and provide an efficient atmosphere for their employees. It has also given them the ability to adjust for growth for future generations.

Ebert Enterprises LLC – owned by Randy and Renee Ebert – was chosen to host the 2017 Wisconsin Farm Technology Days Inc show. Randy and Renee are the sixth generation of the family to live on the farm. The Ebert's farm showcases all aspects of agriculture in Kewaunee County.

Designed for continuous, around-the-clock milking, the BouMatic Xcalibur 360EX is rugged and precision engineered to deliver unrivalled throughput and maximum efficiency for a dairy operation.

Reducing the risk of downtime and finding ways to help an operator save cost with energy efficiency are all factors of the design. Super strong radial



arms link the platform to the centre. The platform rotates on a massive circular double I-beam rail system with nylon rollers for the ultimate in smooth operation that is safe and easy on the cows. The extremely durable nylon rollers require no lubrication and reduces maintenance costs. The rotary electric drive system saves operating costs with an energy efficient design.

The system also provides comfort to both the cow and operator. The sloped concrete platform deck enhances cleaning and promotes sure footing for the cows and a quiet environment for milking. Low profile cabinets eliminate an intimidating maze of pipes and a well-designed entrance and exit add to the cow's comfort.

Each stall has an integrated system console to house automation components and pulsators and provides easy access to CIP jetter cups. Automation is within easy reach of the operators to prevent fatigue. Fold-down jettie doors are positioned for easy access and quick set-up.

Smooth operation, clean, contemporary lines and easy cow loading and unloading are hallmarks of BouMatic's rotary milking system. Through increased cow comfort, operator efficiencies, improved equipment performance, and long lasting construction, the Xcalibur 360EX provides dairy operators with the ability to harvest the highest quality milk gently, quickly and completely.

**boumatic.com**



This supplement was produced by International Dairy Topics as a service to dairy professionals.

The Milking Parlour Supplement is included with International Dairy Topics each year. If you would like to be considered for inclusion in the next edition please contact us for more details.

International  
**Dairy  
Topics**

info@positiveaction.co.uk  
www.positiveaction.co.uk

Tel: +44 1377 241724

