# DeLaval DelPro<sup>™</sup>



DelPro is at the heart of everything we do, and with an E-Series Rotary, it will be at the heart of everything you do too.

Capturing data and drowning you in numbers and spreadsheets back in the office is one thing. Delivering you accurate, timely, useful information that helps you make real-time decisions right there in the parlor – is quite another.

DelPro is not just one piece of farm management software, it is a full suite of applications, sensors, BioModels and interfaces that are integrated with your E-Series Rotary, allowing to make informed decisions about milking, reproduction, mastitis control, feeding, health, milk yield and productivity.



# DeLaval DelPro<sup>™</sup>

## System thinking

At the heart of every DeLaval solution is our farm management platform – DelPro. It is what turns all the data collected by your E-Series Rotary and farm management sensors, into useful, easily understood information to help you make better, faster, more accurate decisions.

## **Benefits**

- One easy to use platform
- Recommend action to take
- Complete overview of your whole farm
- Compare group performance
- Heat detection
- Reproduction analysis
- Safe, controlled feed strategies
- Animal feed monitoring
- Animal health records
- Planned health/vaccinations checks
- Health attentions
- Key Performance Indicators
- Device and service monitoring



Variable speed

> Crowd gate control

Farm monitoring camera

## The Cockpit unlocks the possibility of one-person operation.

It is about giving access to more information, more automation, more functions and more technology than we've ever given them before – and to deliver it so that one person can control every milking safely, comfortably and easily, from a central point - the place where you get total control – the Cockpit of a DeLaval Rotary.

## It all revolves around you

It may be positioned on the outside of the rotary, but everything about it puts you at the centre.

It's not just that it is possible to control the rotary – we have designed it so that it is easy, fast and low stress on your body.

Simple things like the balance of the clusters to make cups-on easier, all the way to the placement of the larger higher definition touchscreen control panel and the lookthrough bail that makes it easier to keep your eyes on your milking operation and act quickly and effectively when you see an opportunity to do so.





## Farm monitoring camera

The DeLaval Farm Monitoring Camera provides safe supervision of the cows. The portable and wireless receiver allows for constant supervision of the cows. The milker can keep an eye on the exit area, backing gate and holding yard.

### Cow back off system

Reduces unnecessary second rotation cows, helping to improve throughput.

### **Crowd gate control**

Crowd gate controls are now integrated into the rotary controller family. The crowd gate can now automatically advance without manual interaction of an operator.

## Interactive Data Display (IDD)

Presents the status of all cows being milked at each milking point on your rotary.

## Non-negotiable health and safety features

The Rotary Controller shows on the touch screen all the safety trip positions and shows if they are triggered during the milking session. Health and safety is a priority at DeLaval.

## Emergency mode

A redundancy is built in to allow rotation of the platform to remove cows if the control system fails.

### Cow group speed control

Customized speed for different herds or groups.

### Controller

We use full words and graphics, not codes, so decisions can be made on the go.

### Visual alarms

Quick visual alarms to avoid milking disruptions and to help workers and cows operate safely.

### Audible alarms

### Variable speed

Adjust platform speed for optimal throughput so the operator can focus on attachment.

### **Comfort start**

Automatic start, fast attachment with low physical stress.

#### Adjustable slow down

Reduces second rotation cows.



Variable speed

> Farm monitoring camera

## The Cockpit provides the necessary information and controls at the operators fingertips.

It is about giving access to more information, more automation, more functions and more technology than we've ever given them before – and to deliver it so that one person can control every milking safely, comfortably and easily, from a central point - the place where you get total control – the Cockpit of a DeLaval Rotary.

## Control the flow

((I) [13.21] Star

Take total control of cowflow, workflow, information flow and milk flow.

With the pairing of the large touch screen for interaction with DelPro and the RC5 the operator can make multiple decisions on the fly in one spot.

All of this will help you to create an efficient and productive milking routine and deliver that other flow - cashflow.



Crowd gate control



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## **Visual alarms**

Quick, visual alarms with full word text help to minimize stress during disruptions so the rotary can keep on spinning. Customized speed for different herds or groups.

Cow group speed control

#### Variable speed

Adjust platform speed for optimal throughput so the operator can focus on attachment.



# DeLaval FastBail<sup>™</sup>

Better positioning 15 degree angled bail Central to the fast flow of cows.

Low profile

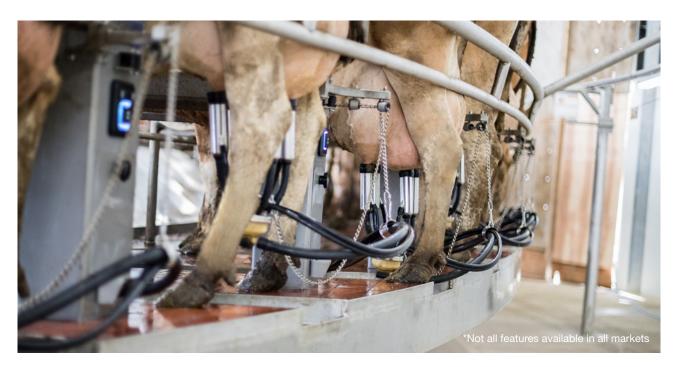
The DeLaval E-Series Rotaries designed to create continuous and consistent movement of cows through milking - we call this Fast Flow. At the heart of this sytem is a bail that cows want to enter. This is the secret of DeLaval FastBail.

With an open, low, slim profile bail with no sharp edges cows are eager to get onto the platform. FastBail can be teamed with an optional 1.5 cow or wider entry for high throughput and seamless cow traffic.

The goal of the bail and entry design is to provide fast and efficient loading to minimize the number of empty bails on the rotary, can keep overall rotary throughput at its maximum.



## DeLaval FastBail<sup>™</sup>



### **Better positioning**

Cow's inside hind leg is closer to and behind cabinet, reducing contact with cluster - less polluting of clusters, better detachment and more comfortable for cows.

### **Comfortable stalling**

Calm, comfortable animals create cleaner safer milking platforms.

## **Better vision for cows**

Taking advantage of the nature of curious herd animals is key to encouraging them to enjoy the ride.

#### Milk tube support

Milk tube support needs less movement from milker which makes for a faster more manageable workload and less operator fatigue.

### Slim lines

The design feels more open, which encourages cows onto the platform, and creates the ability to maximize milking points.

## **Comfort start**

Automatic start, fast attachment with low physical stress.

## 15 degree angled bail

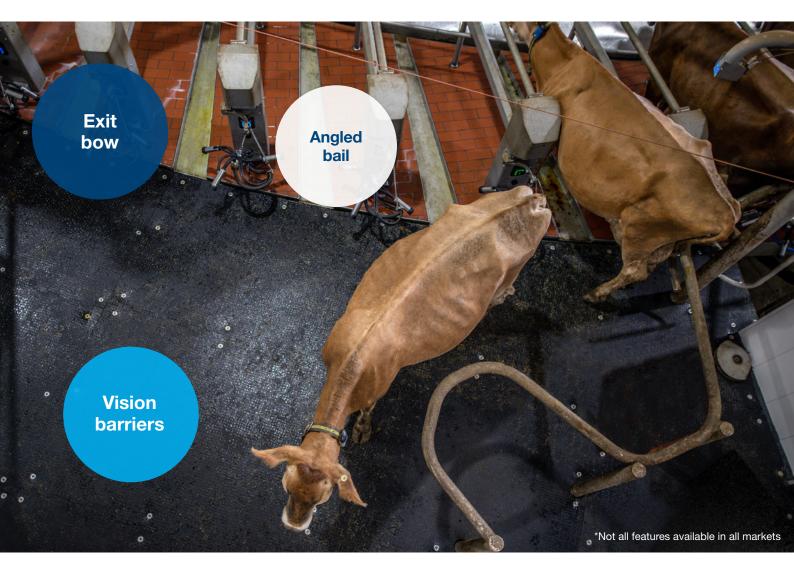
Forms a perfect line with the exit bow to allow a more natural arc of movement for the cow which directly translates to speed of entry and exit.

### Low profile

The low profile makes everything more open and greatly assists the movement of the cow, especially at exit. It all adds up to time and throughput.



## DeLaval FastExit<sup>™</sup>



The main restriction on the flow of cows in a milking system is congestion at exit. Not on E-Series Rotaries. The E-Series Rotaries harness many of the exit features pioneered by DeLaval over the last decades on some of our largest, highest throughput rotary systems ever made.

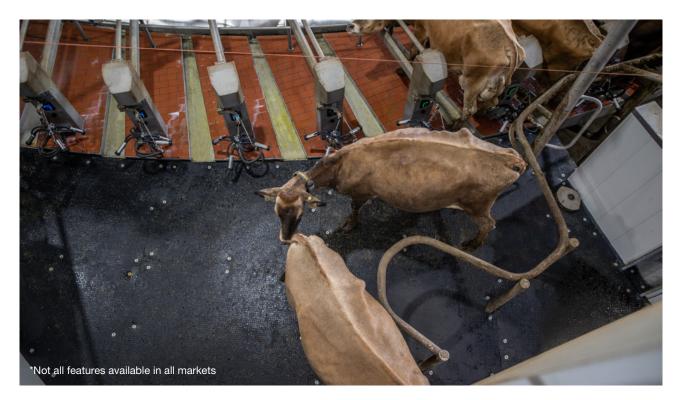
By bringing these features to the E-Series Rotaries we have created a throughput machine.

The key is the combination of an angled bail, a low profile bail and an exit bow.

This creates a simple and comfortable exit for your cows, and this translates directly to speed of exit.



# DeLaval FastExit<sup>™</sup>



## **Vision barriers**

To minimize distractions for cows entering and exiting the rotary vision barriers are installed to block their view. With this feature cows are interested in continuing to walk forward and not distracted by other cows.

### **Exit bow**

The exit bow works with the angle of the bail to naturally guide the cow in the direction she needs to turn for exit. It also minimizes the number to backwards steps she needs to make, so she can walk forward faster.

### **Angled bail**

The angled bail already turns the cows towards the direction of exit. This equates to less navigation the cow needs to make when exiting the platform. As she is taking a couple of steps off the platform the platform continues to turn in the direction of exit.

### Low profile bail

Allows cows to begin turning earlier and without having to raise their heads in an uncomfortable and unnatural motion while trying to navigate off the platform. The Fast Flow continues at exit.



Agreed cost

# **DeLaval InService** All-Inclusive

## C. DeLaval

\*Not all features available in all markets

Your milking system, like any hard worker, requires maintenance, servicing and replacement of oils, filters, liners, detergents as well as regular cleaning to keep it performing at the level it was designed to when you purchased it. We call that level of performance the blue line, and we call the performance plans that ensure it - InService All-Inclusive.

## Your performance plan

We call these plans InService All-Inclusive, and they allow you to select the level of performance optimization you require. From a baseline plan all the way to the full package which includes all your scheduled servicing and settings adjustments as well as the regular supply and replacement of E-Series recommended detergents, teat dips, sprays, oils, filters and liners – all for one agreed monthly price, which means you know that every time you commence milking – your E-Series Rotary is ready to milk at the blue line.



# **DeLaval InService**<sup>™</sup> **All-Inclusive**

## Make sure that your milking system is running at full power, at all times, on your terms.

With DeLaval InService<sup>™</sup> All-Inclusive we will carry out routine maintenance, scheduled servicing and the replenishment of consumables; all for one agreed price and with a payment structure that works for you.



 $\bigotimes$ 

Pulsation, vacuum settings and liners all adjusted and replaced on time for consistent udder health.



InService All-Inclusive performs key tasks when they are needed and before your performance suffers.

- One agreed price
- Peace of mind
- Easy to budget
- Consumables included
- Service & maintenance
- Liners & tubes
- Milk filters & oil
- Cleaning routines & analysis
- Vacuum & pulsation
- Delivered on schedule
- Fully trained technician
- Teat spray & detergents

### If you wait to service

- your system here:How do you budget for
- these costs?How much productivity
  - was lost?
- Was it worth running the risk of a break-down?

Don't wait for an increase in SCC before you take action.

 $\checkmark$ 

## Performance is All-Included

If you only perform service tasks once you notice a drop in performance you are wasting your hard-earned money.



## DeLaval FastLane<sup>™</sup>



The expertise we have gained designing, manufacturing and monitoring the performance of the high throughput dairy systems around the world, have been applied to the DeLaval E-Series Rotaries.

In the most efficient systems, the key limitation to throughput has always been cow traffic. With our new FastLane<sup>™</sup> bridge, we have bought 135 years of experience and millions of dollars of research to make sure cows move as quickly calmly and efficiently as possible.



# DeLaval FastLane



## How wide do you want the entry?

The new DeLaval Rotary E100 series DeLaval FastLane<sup>™</sup> incorporates the choice of either single cow entry or a one and a half cow entry lane. It's all about optimising the number of cows per hour of milking.

## **Flooring options**

DeLaval FastLane<sup>™</sup> flooring options include rubber matting which provides great padded comfort underfoot. There is significantly less abrasion on the hoof than concrete leading to less stress on the cow and better hoof health. Cows that are confident in their footing are happy to walk to and from the entry/exit area.

### More time ruminating

A comfortable cow is scientifically proven to be a cow producing to her genetic and feed potential. Rumination is a quick indicator of how comfortable the cow is. DeLaval FastLane<sup>™</sup> helps the cows to enter and exit the milking system with low stress and ease of movement.

## Designing the exit lane

The exit lane provides a space large enough, with a funnel for multiple cows to exit the milking parlour, which reduces the number of inactive milking points, increasing throughput without creating platform stoppages.

### Vision is critical

The ability of the milking operator to see the cows in the DeLaval FastLane<sup>™</sup> from the DeLaval Cockpit<sup>™</sup> area is an important part of the DeLaval FastLane<sup>™</sup> design. A vision barrier that prevents the cows seeing each other on entry or exit aids in improving cow traffic and throughput.

### **Bail design**

Low profile bail speeds up entry and exit due to no visible barriers for the cow. The cow can then start the exit process earlier with no restrictions to her flow.

## **Drafting and weighting**

The DeLaval FastLane<sup>™</sup> exit area creates a seamless blend from the exit area through the DeLaval three way sort gate as cows prepare to move on to the paddock, vet area or footbath lane.

### No right angles

Rounded curves prevent injury to cows in the entry/exit area. The incorporation of this design aspect carries through with the cow comfort ethos at DeLaval. The movement of cows without hindrance or fear of injury as cows move to and from the milking plant is imperative.



## DeLaval Comfort Bail<sup>™</sup>

For a calm, quiet and safe rotary milking environment.

Look-through bail improves cow flow

Automatic teat spray

One of the real advantages of choosing a DeLaval E-Series Rotary is that you aren't just getting access to everything we have learned making rotary milking systems globally – but also our knowledge from designing parlour and voluntary milking systems.

At the centre of this approach is the revolutionary DeLaval ComfortBail<sup>™</sup>. Especially designed for the DeLaval E-Series Rotaries, this bail hides the wires, pipes and technology needed in an advanced rotary milking platform, and integrates them into the bail. This ensures clearer lines of visibility for worker and cow; easier, safer access for the milker, and a more consistent approach to the task of getting cows on, milked and gone calmly and quickly.



# DeLaval Comfort Bail<sup>™</sup>



## Retention

The new retention bars reduce the labour functions the milker needs to perform. They can operate automatically or in combination with DeLaval DelPro<sup>™</sup> Farm Manager via the DeLaval Cockpit<sup>™</sup> to retain cows in their milking positions for the next rotation for their targeted milk yield for that session.

## Automatic teat spray

Four individual spray nozzles provide accurate coverage seconds after cluster removal, and the added benefit of the locator provides fast and easy access for cupping.

## Low profile

Improves flow and cow comfort – cow doesn't need to lift her head on entry or exit.

Look-through bail improves cow flow

## Stronger take off power

Horizontally placed Automatic Cluster Removers integrated into the bail help ensure that clusters don't hit the deck and get damaged, while correct alignment helps ensure safe and gentle removal from the cow.

## **Bail divider**

Protects all the automation equipment and ensures the cow positions herself correctly – the unique design helps the cows present ready for milking in a position that makes attachment faster and simpler.

## **Cluster drop**

Creates a clear and open bail for easy entry and reduced breakages, less tangle, more visibility and faster attachment.

## **Cow locator**

- Integrated into bail
- Safe gentle removal

## Integrated technology

Power, water, milk, air, data cabling and piping is all built-in and protected.

### Automatic cluster removal

- Integrated into bail
- Safe gentle removal



# DeLaval Advisory

Feed Management

Performance optimization

Milk cooling transport and storage

Training and routines

Total system approach

Plan and manage growth

Our team of Advisors have the skills and knowledge to help you push the performance of your E-Series Rotary further. Not only is each advisor a great source of general dairy knowledge, they each have particular specialities, which is why they work together to make sure the right advice and support is always available for you. They are a team, and they are your team.

## We take a 360° view of your farm

For your E-Series Rotary to generate the best results it is essential that it is viewed as one part of your farm system. A system that works seamlessly to generate more with less.



## **DeLaval Advisory**



DeLaval are proud to partner with dairy farmers all over the world, from the very largest dairy farms to some of the very smallest, and everything in between. We still commercially operate the family farm that Gustaf DeLaval bought in 1894 which is where our head office is.

This means dairy is in our blood, is what we do – in fact it's all we do – which is why we have built up a huge amount of experience and expertise. When you choose DeLaval, you get access to all that knowledge and practical advice.

Our team of advisors can help out with advice before, during and long after installation.

- · Get the planning right
- Build a complete system
- Retro-fit adjustments
- Ongoing performance optimization

## Post Installation Optimization

Once you have installed your new system, we are there to help you with ongoing performance improvement. At the heart of this process is DelPro. Our team can help you use the wealth of information available to put in place, monitor and deliver on your performance plans.

## Start-Up Training

Get the most out of your E-Series rotary by making sure you know all the tricks and tips to get the most out of it.



## DeLaval Evanza<sup>™</sup>



### Turn up milking with DeLaval Evanza milking cluster.

The most efficient cluster we've ever developed helps to achieve more milk and better udder health, with less labour required.

Compared to our previous clusters, the revolutionary, exclusive and patented Evanza milking cluster is not just faster, it's also better for your cows, better for your milkers and better for your bottom line. It is quite simply our most advanced cluster, and in combination with DeLaval E-Series Rotaries it is a key part of what makes it so efficient.



# DeLaval Evanza<sup>™</sup>



## With AirWash it's even better

The Rotary E300 can be equipped with an optional AirWash system, which means your Evanza Clusters are fully flushed automatically after every milking. This reduces cross contamination and mastitis and makes your milking routine flow even better.

## DeLaval Clover<sup>™</sup> Cartridge

Ground-breaking cartridge construction with incorporated Clover design for increased milking performance and lifetime.

## **DeLaval Turn&Milk**<sup>™</sup>

Turn & Milk principle of Evanza for effortless and time saving exchange.

## **DeLaval TopFlow**<sup>™</sup>

Unique TopFlow technology for improved milk flow and udder health.

**Top quality materials** 

### Ergonomic

Ergonomic grips and excellent weight distribution for easy attachment.

Cartridge eliminates twisted liners

### Labour saving

## Short milk tube

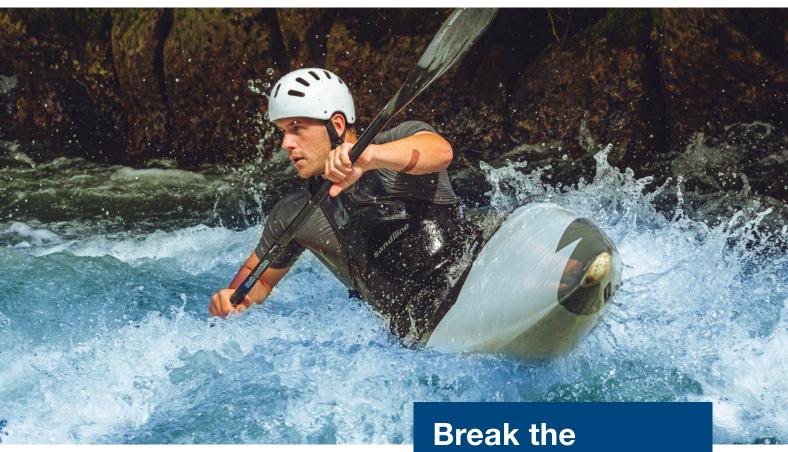
Bayonet type attachment.

Durable cups for robustness

## Lighter for easy handling

**DeLaval** 

## DeLaval **Flow-Responsive**<sup>™</sup> Milking



## **Milk Faster** Harness the Flow

Only DeLaval Flow-Responsive<sup>™</sup> Milking can automatically respond to each cow's milk flow, which means instead of "guessing" when to apply vacuum, Your DeLaval Rotary "knows" when the milk flow is able to support higher vacuum levels and when it needs to be protected with lower levels. This exclusive technology gives you the opportunity to milk faster and to protect teat condition and animal welfare levels.

## speed barrier

Old-style mono-vac milking technology still used by non DeLaval rotaries limits the speed of milking because of the risk of over-milking or under-milking at various stages of each milking session.

A DeLaval Rotary can allow you to break this speed barrier. By milking at a lower vacuum level at the start and end of milking, increasing to a level significantly higher than mono vac systems are capable of. Automatically.

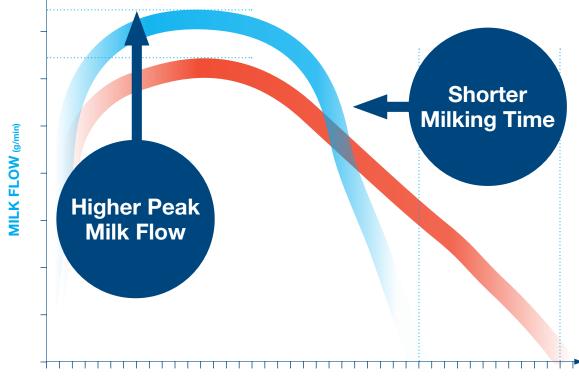


# DeLaval Flow-Responsive<sup>™</sup> Milking

When every second counts, if you're not able to respond to what's actually happening you will be sacrificing performance. It's the same with milking. Don't milk at one vacuum level regardless of the actual milk flow, with DeLaval Flow-Responsive<sup>™</sup> Milking vacuum, pulsation and stimulation technology your system adjusts automatically to let you go significantly faster without compromising udder health.

## **Benefits**

- 66% Less walking distance<sup>[1,2]</sup>
- Last cow ready >10% Faster<sup>[1]</sup>
- 40% Reduction in biomodalities<sup>[1,2]</sup>
- 15sec Less cups on time<sup>[1]</sup>
- 24% Less prep time<sup>[1,2]</sup>
- DeLaval Flow-Responsive<sup>™</sup>
  Milking
  Single Fixed Vacuum



#### **MILKING DURATION (sec)**

 These are results producers were able to achieve on test farms. Results may vary and are not guaranteed. Difference can be seen related to numbers of milkings per day.
 Data recorded in static parlour.



# The Key Features

The fast flow principle that underpins everything we have built into our Rotaries relies on the seamless interaction of every part of the system.

We are here to help you to select the best rotary for the way you milk, the way you work and your plans for the future. One size doesn't fit all - but the good news is - we have every size and type of rotary you could need.

	E100	E300	E500
DeLaval Cockpit <sup>™</sup>	•	•	•
DeLaval ComfortBail <sup>™</sup>	•		
DeLaval FastLane <sup>™</sup>	•		
DeLaval FastBail <sup>™</sup>		•	•
DeLaval FastExit <sup>™</sup>		•	•
DeLaval WorkSure <sup>™</sup>			•
DeLaval Advisory <sup>™</sup>	•	•	•
DeLaval InService <sup>™</sup> All-Inclusive	•	•	•
DeLaval DelPro™	•	•	•
DeLaval Flow-Responsive™ Milking			•

