



IT ALL REVOLVES AROUND YOU

DeLaval VMS[™] is all about making dairy farming more personal. More accurate. More profitable.

With two models in the VMS[™] series, we are able to treat each farm, each farmer, each cow, even each teat – individually – and to help you to create a better place to be for workers, cows, you and your families.

Taking a system approach – with you at the centre of everything we do.

A DeLaval milking system with VMS™ at the centre is the result of thousands of hours of development focussed on finding ways to help dairy farmers to deliver more, better quality milk from healthier cows, without making it harder for you to have a healthy lifestyle.

To do this it is essential to take a whole-farm approach, and because we have been focussed on the challenges facing dairy farmers for well over a century, we have been able to apply all of that experience and knowledge to create the VMS™ Series of systems.

Ultimately VMS[™] isn't about us, it's about you, your herd, your farm, your lifestyle and your profitability. Put us to work, and make VMS[™] your milking system, after all - it all revolves around you.





DeLaval VMS Series

VMS[™] **V**300

Vera's Milking System

With two models available, the DeLaval VMS[™] Series gives you options to create the voluntary milking system that best matches your needs and farming style. Both the VMS[™] V300 and VMS[™] V310 feature the core functionality that helps to ensure your cows are milked to their full potential.

"The biggest impact on the cows has been on the production level."

DeLaval VMS[™] V300

Voluntary Milking System

VMS[™] V310

Christian's milking system

With the VMS™ V310 that productivity advantage is extended to the next generation of cows as well, with Progesterone based sampling and analysis adding full pregnancy and heat detection to the list of tasks these amazing systems are capable of completing automatically.

DeLaval VMS[™] V310

Voluntary Milking System



Reproduction Management



& D_{Laval}



Animal Welfare

As a pure Voluntary Milking System, the VMS™ is not a conveyer belt that treats cows like products, it is a fully automated milking system that helps generate better results for you and your animals.

TAKING A 36 YOUR



Work Efficiency

The VMS™ Series is all about creating a better work environment and lifestyle for you and anyone who works on your farm.

Farm Profitability

Our system is designed to help you generate more milk, more efficiently, more safely and more sustainably, in a way that also meets the consumer pressures that farmers the world over are facing today.



O VIEW OF FARM

Food Safety

Every day, every milking, every cow; your VMS™ will help ensure that you are at the forefront of food safety into the future.





32% **Pre-defined** improvement service costs in insemination rate** More than 3500_{kg} **Higher capacity*** milk per day* 99.8% Attachment rate* 50% attachment time* *Data collected on test farms and pilot farms. Data compared to DeLaval VMS™ Classic. Results may vary and are not guaranteed. ** Data from VMS V310 pilot farms.

THE KEY FEATURES

DeLaval VMS[™] harnesses and applies technologies that weren't previously available, to do things that were never possible on a dairy farm, at any time in history.





DeLaval DelPro[™]

Our most advanced milking system requires the most advanced farm management platform.



DeLaval InControl[™]

A seamless user experience keeping you connected to your VMS™.



DeLaval PureFlow

A totally separate cup delivers the ultimate teat preparation.



DeLaval InSight[™]

Our most advanced camera and software combination delivers our fastest, smoothest process.



DeLaval RePro[™]

Incorporated into the VMS™ V310 turning your milking system into the ultimate reproduction management tool.



DeLaval Advisory

Start the way you mean to continue with help where you need it.



DeLaval InService[™] All-Inclusive

You may never think about the service the same way again.

DeLaval DelPro

It isn't enough that the DeLaval VMS™ Series is our best of breed milking systems. It is essential that it is capable of forming the central hub for your entire farm, and that's where DeLaval DelPro™ comes to the fore.

We have built DelPro and its suite of sensors and applications to give you more control than we have ever given you before, by surrounding you with faster, more accurate access to valuable information, analysis and reports that will help you make better decisions on your farm.

You set your management objectives and targets, and DelPro is there to make sure you have everything you need to put your plans into action, all the information you need to monitor and adjust those plans, and the alerts and analysis to stay on track.

To do this, whether you have 1 or 100+ VMS, DelPro pulls the many data sources on your dairy farm together, processes and analyses them to create valuable information and reports to help you do your job. With a range of applications to help you harness all that power depending on the task at hand, DelPro puts you, and usability, at the centre of everything it does. Fast, easily understood, valuable, accurate and actionable information to help you meet the challenges of modern dairy farming.

When you need to make a decision on your dairy farm, the first place to turn for trusted, useful information is DelPro. It's where better decisions start.





DelPro[™] **FarmManager**



DelPro[™] Companion



king

Reproduction

Feeding

DeLaval InControl[™]





DelPro[™] **BioModels**



DelPro™ Certified Trainers

DeLaval InControl[™]

DeLaval InControl™ doesn't just make it easy to control and monitor your DeLaval VMS™; it will provide you with simple visual reports, analysis and information to help you to make better decisions. DeLaval InControl™ means you can call up the performance of a cow, see throughput statistics or change the settings of your system.

Best of all, it delivers all this functionality to you, wherever you want it. Using either the touchscreen or a mobile device, you are always able to view your VMS[™], to control its operation, track daily routines, update individual cow data or share information with staff.



You're InControl

A seamless user experience keeping you connected to your VMS.

Manage routines

Quickly and easily view

- Cow queue to VMS™
- Individual cow status and performance data
- Find my cow in the barn or pasture
- Recently milked cow info
- Activity monitoring information
- Somatic cell count information
- Fine-tune individual cow settings

Share information

Easy to use

- Large buttons
- Simple icons
- Intuitive layout

Mobile version

• For Android and iOS

View cameras

DeLaval InControl also makes it possible to plug in extra cameras and sort gates so that you have one central point to view and control your operation.

DeLaval PureFlow[™]

If you are looking for our best milking process then look no further than The DeLaval VMS™ Series - after all, milking is its middle name.

It all starts with preparation - DeLaval PureFlow™ doesn't just clean udders, it prepares them. Using the exclusive transparent cup that allows you to see it in action, each teat is individually cleaned and stimulated to improve letdown and productivity.

Add to this the separation of pre-milk, which is removed to a waste container via a separate line, and fully adjustable settings including the ability to add soap for enhanced cleaning, and you have the ultimate preparation.

Once milking is complete, the DeLaval PureFlow[™] cup is fully flushed and cleaned as part of the comprehensive cleaning routine that is automatically carried out by the VMS.[™]

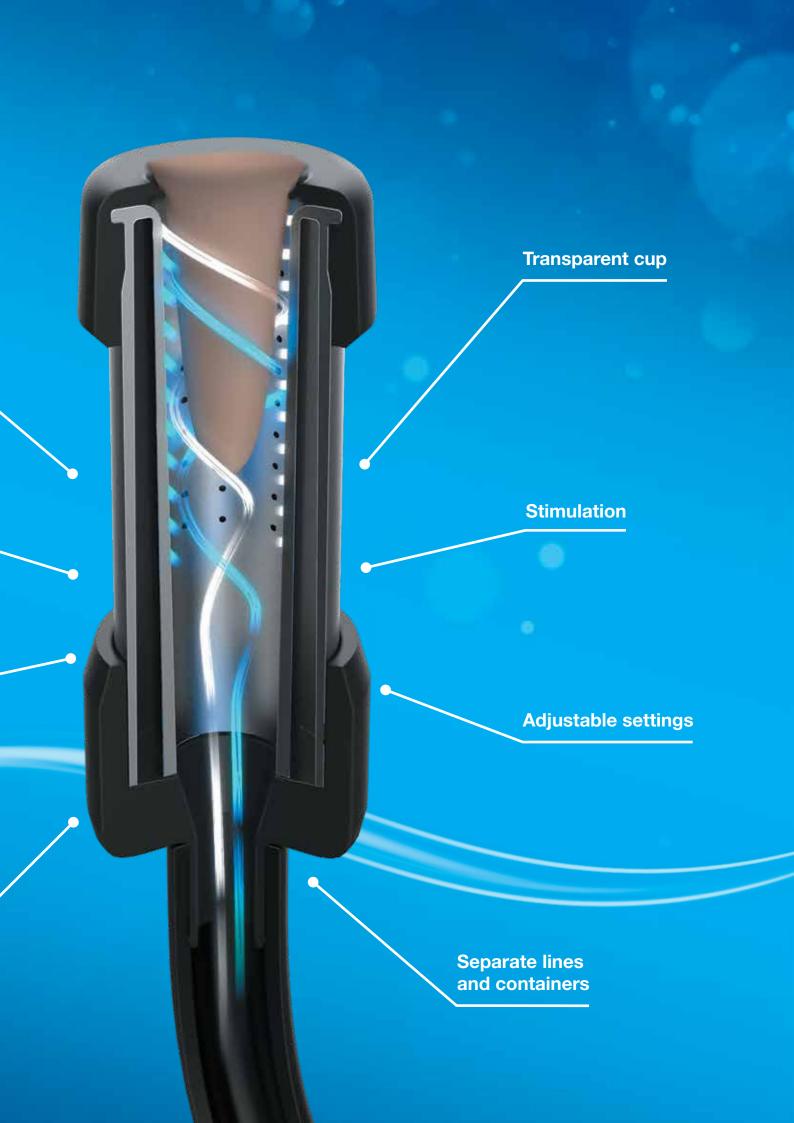
Better hygiene

Air and water

The start of the most gentle and effective milking process we've ever created.

Soaps can be added

Separate cup



DeLaval InSight[™]

When you observe a DeLaval VMS[™] in operation there are two things that strike you immediately. How calm the cows are, and how gently and smoothly the robotic arms go about the repetitive tasks of cleaning, preparing, treating, attaching and spraying.

The key technology that makes this possible is DeLaval InSight.™

What you see is the smoother, faster, more accurate arm than we've ever created. An arm that makes attachment, preparation, milking, teat-spraying and cleaning all much faster, more accurate and more efficient. But what is driving these performance improvements is the interplay of our most sophisticated camera, hardware and software ever seen in a milking environment.

99.8% Attachment rate*

♠ DeLaval

Self learning

Most advanced software

Self cleaning

Two nozzles for sprays

^{*}Data collected on test farms and pilot farms.
Results may vary and are not guaranteed.



DeLaval RePro

DeLaval RePro™ turns the ultimate milking and animal welfare system into a complete reproduction management tool as well. DeLaval RePro™ provides a clear picture of each animal's reproductive status using DelPro BioModels to interpret the progesterone level in milk samples taken automatically by your VMS V310.

Does she begin to cycle after calving; is she really in heat (even a silent heat); does she have a cyst; is she now pregnant or has she had an early abortion? All these critical questions are answered automatically and notifications presented in your DelPro Applications.

All of this can add up to healthier cows, reduced vet costs, improved Al costs and cows becoming pregnant at the right time resulting in more productive lactations – which you know means more money.

Automatic pregnancy check

Detect abnormal reproduction cycles

Notification of early abortions

More productive lactations

Fewer open cows

Reduced culling

^{*} Data from VMS V310 pilot farms.



DeLaval Advisory

Moving to a Voluntary Milking System is, for many farmers, an excellent way to potentially generate more milk, more efficiently, more safely and more sustainably, in a way that also meets the consumer pressures that dairy farmers face today.

Our advisory and planning teams are available to help you assess the suitability of a Voluntary Milking System for your situation, and to help you figure out how DeLaval VMS™ Series will help deliver you a better bottom line.

Training and routines

Standard Operating Procedures

Total system approach

Milk Quality

Plan and manage growth



We take a 360° view of your farm

Performance optimisation

Energy savings per kg milk

A DoLavai

Get the most out of DelPro™

System integration sensors and customisation

Milk cooling transport and storage

Barn planning conversion or new build

Reproduction

Animal Health





It's all included

With a DeLaval InService™ All-Inclusive agreement in place we will deliver Service and Consumables for a fixed price, leaving you to get on with the business of dairy farming secure in the knowledge that every time the cups go on, your system is performing to expectations.

Service and maintenance are included

Because DeLaval VMS[™] works 24/7, like any hard working system it needs to be serviced at regular intervals for pre-determined actions, with InService[™] All-Inclusive, we will make sure these are performed on schedule.

Results are included

High somatic cell count (SCC) will significantly decrease milk production. As part of your InService™ All-Inclusive agreement we will make sure that you get the most out of the VMS™ teat-spraying functions by matching the right teat sprays to your situation.

Certainty is included

The bigger the operation you have, the more complex it is to keep track of your production costs. With InService™ All-Inclusive we can eliminate that complexity, we will agree up-front to a consistent cost per month, per quarter or whatever you prefer.

Consumables are included

It's not just the labour hours that are included in your InService™ All-Inclusive agreement. We will also make sure that you do not run out of detergent, teat spray, milk filters or oil.

Performance is included

When it comes to the effect of combining service and consumables on performance, it is truly a case of 1+1=3. We will make sure that you are milking with the right liners and correct vacuum and pulsation settings for your herd. We will also ensure your cleaning routines, temperatures and dosing are delivering the best quality milk.

Milk Quality is included

You can be sure that your detergents, liners, cleaning routines and pulsation settings are operating in total harmony to help you deliver the Milk Quality you demand.



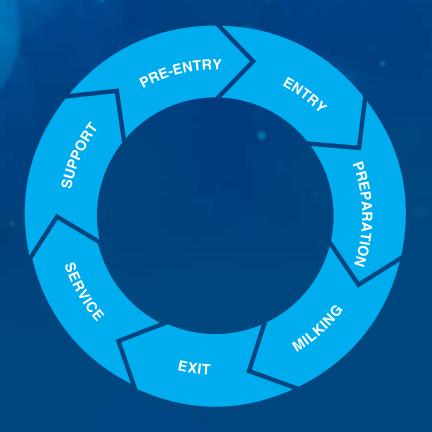
Keeping you milking at the Blue Line

With DeLaval InService[™] 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.

⚠ DeLaval







PUTTING IT ALL TOGETHER

The DeLaval VMS™ is so much more than just a milking robot. It is at the centre of a whole new way of dairy farming that when implemented well, helps ensure optimal results at each and every step.

⚠ DeLaval





PRE-ENTRY

Milking is only one aspect of dairy farming. It is where you see the results of your hard work, but those results are generated in the barn, on pasture, or however you choose to feed and care for your animals.



TAKING A 360° VIEW



Animal Welfare

Treats each cow as an individual, helping to ensure optimal health outcomes.



Farm Profitability

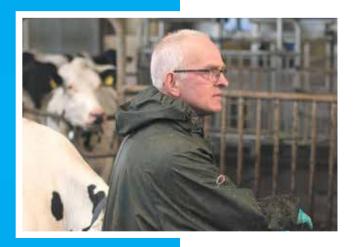
Designed to encourage higher feed intake with more time to rest can create more milk for a lifetime increase in milk production.



Work Efficiency

Designed to result in less time milking and sorting cows means more time on profitable tasks.

There are three major parts to the pre-milking stage of a Voluntary Milking System:



People Management

Focus on the health and productivity of your animals, with consistent, easily understood routines and standard operating procedures.



Cow Management

Free cow traffic, milk first or feed first, partial or total mixed rations, pasture or some combination that works for you – if it works for your cows. It works with DeLaval VMS.™



Milking Management

With the ability to control everything from your mobile, touch screen or PC, you can easily view the cow queue to find the cows that are eligible for milking, as well as managing the interactions between different processes to make it easier for you to get the most out of your dairy farm.



ENTRY

If you want the cows to do some of the work you would normally have to do yourself, like fetching and sorting, it is important that the entry phase is designed with the cow in mind.



DeLaval VMS™ treats each cow as an individual

Each cow is identified on entry and the length of the stall is automatically adjusted to suit her needs. The width can also be adjusted at installation to allow for your herd's breed and size profile. Using the identification, VMS™ deploys the most sophisticated permission system we have ever created.

TAKING A 360° VIEW



Animal Welfare

Permission system can create a virtuous circle of improved productivity, fertility and longevity.



Farm Profitability

Assess each cow in real-time to permit another milking, or to guide her back to the feed table.



Work Efficiency

Track daily routines, create reports, view real-time data, call up the performance of a cow and see throughput statistics.



Milking only starts if it's beneficial

VMS[™] doesn't just milk every cow, regardless of the economic value. It calculates permission based on a combination of her yield and the time since her last milking.

This means it only milks those cows for which another milking will be beneficial. This can result in a better yield than any other system, as well as better udder health. For some this may mean a 4th milking at 3am, for others in the same group, only twice in the same day.

If she is given permission to be milked, she is delivered a customized supplement feed mix, if not – no concentrate is given and she is exited seamlessly from the VMS[™] so that the next cow can enter.



PREPARATION

It starts with pre-spray, with two nozzles that can be programmed depending on your preferences or seasonal requirements, the DeLaval VMS™ delivers pre and post spray – targeted not at the whole udder with the coverage errors and waste associated, but at each teat with incredible accuracy helping to ensure a better result.



Working with nature

When a cow enters the VMS™ she will have a small amount of milk already in her udder and teat cisterns ready for evacuation. This will be about 45 seconds worth of milk. The true flow of milk however, will not begin unless Oxytocin has been released and is squeezing the cow's alveoli.

To encourage consistent milk flow by stimulating Oxytocin release, VMS™ doesn't just clean the teat. It prepares it for milking by using a combination of teat spray for disinfection and the DeLaval PureFlow™ cup for proper cleaning. It stimulates oxytocin release and facilitates milk ejection before vacuum is applied to teats by means of a combination of water (or cleaning solution if desired) and air.

This results in a superior flow pattern and less time with cups on, which is great for udder health.

TAKING A 360° VIEW



Animal Welfare

Delivering Oxytocin based letdown due to a focus on each teat.



Farm Profitability

Flexibility to milk a wider range of udders can mean less culling of productive animals.



Work Efficiency

As well as working with all udder types, it is also safe, easy, fast and comfortable for you to manually milk with no disruption.



Food Safety

No cross contamination and reduced Mastitis remainder of your herd.



So important it demands a separate cup

The VMS™ uses a separate, dedicated cup to eliminate any chance of cross-contamination or residue during the preparation stage. Once attached, the DeLaval PureFlow™ cup uses a unique combination of air and water to clean, stimulate and strip the teat ready for milking.

During this process pre-milk is collected, transported and dumped for each cow, again using separate lines and containers to ensure there is no risk of cross contamination.

Now the teat is dried and is ready for milking to commence, with the clock already ticking on full Oxytocin based letdown.



MILKING

Productive cows are important to profitability, regardless of their udder size, or teat height, shape or location. Our teat-friendly process can help lower culling rates and provides consistently high milking capacity results.



TAKING A 360° VIEW



Animal Welfare

Gentle on udder and a stress free process is good for your cows.



Farm Profitability

Works with a wide range of cows and udders, and with simple manual milking can reduce culling of productive cows, increasing lifetime milk production.



Work Efficiency

Without teaching, VMS™ does the timeconsuming, repetitive tasks of milking, forming a central point to manage routines and people.



Food Safety

Pulsation and vacuum levels maximise flow, and minimise free fat acids, milk residue and carry over.

REAL Quarter Milking

DeLaval VMS[™] delivers our best milking performance because the VMS[™] V300 and VMS[™] V310 both deliver REAL Quarter Milking.

With a dedicated ICAR approved milk meter for each teat, VMS[™] has taken milking to a new level, delivering incredible gains for animal welfare and productivity.

Using current data, historical information and modeling, VMS[™] is able to automatically adjust pulsation settings and is designed to get the highest result with the least discomfort for each cow.



During milking you can observe milk flow, yield, blood and conductivity and milking interval as well as other key production data; all per quarter, and all compared to last milking.

Smart Pulsation

VMS™ constantly measures each cow's milking performance and adjusts the pulsation ratio accordingly to milk her. The result: faster and less stressful milking, which allows for more milkings per day and shorter waiting times for cows.



With short tubes and a superior vacuum system VMS™ provides better vacuum stability, which leads to better comfort, milk transfer and fewer slips or kick-offs. The shorter tubes also reduce maintenance costs.



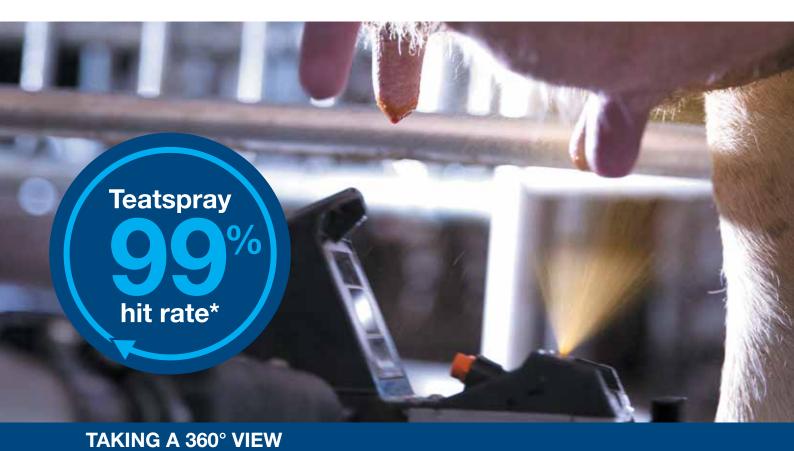
The advanced modeling, combined with the real time flow data from the 4 ICAR approved milk meters makes it possible for VMS™ to detach at the right time, in the right way to protect the sensitive and valuable teats.



EXIT

Like preparation, it's about spending more time now, to save time and money later.

The sophistication and accuracy of the DeLaval InSight[™] means we can now spray each individual teat precisely from a dedicated nozzle. This obviously saves on spray, but more importantly it provides better teat coverage, and therefore can result in better health and productivity outcomes.





Animal Welfare

A two nozzle system which allows different chemicals to be used for pre and post spraying.



Farm Profitability

A targeted teat spray results in a reduction in teat spray consumption. DeLaval RePro[™] helps to deliver more productive lactations - which means more money.



Work Efficiency

Milk only released at exit following analysis of Mastitis Detection Index (MDi), blood and conductivity.

^{*}Data collected on test farms and pilot farms. Results may vary and are not guaranteed.

Getting ready for the next milking

Your VMS[™] will also clean itself to prepare for the next cow. The Auto-Clean process after each milking includes:

- Full flush of DeLaval PureFlow[™] cup (outside/inside)
- Full flush of teat cups and hoses (outside/inside)
- DeLaval InSight[™] camera cleaning using water and sponge
- Deck flush

There is also the option of including full disinfection of the four milking cups and the DeLaval PureFlow[™] cup, and a full spray of the EndEffector.



Successful reproduction management

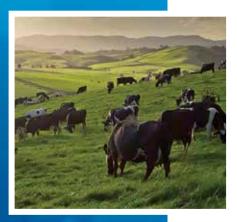
With DeLaval RePro[™] you can get your cows pregnant at the right time by automatically measuring the level of progesterone in milk, informing you when the cows is in heat, when they are pregnant, if there is an early embryonic loss and which cows have abnormal ovarian structures such as cysts.



What happens to the milk?

The quality of the milk is analysed throughout milking so that once milking is finished milk can be diverted based on colour, conductivity or Mastitis Detection Index (MDi).

You set the parameters and milk will automatically be diverted to one of five destinations. This means you can separate colostrum, dump, tank and two more.



What happens to the cow?

For instance you can sort on the DelPro BioModel generated MDi, colour, conductivity or if milking was incomplete.

The MDi provides early indication of cow ill health. The tool analyses several parameters to avoid udder health issues and mastitis. DelPro BioModels calculate the MDi for every cow, at every milking and uses the data to help you ensure better health outcomes.



SERVICE

With the largest global dealer and service partner network, and the ability to integrate any number of DeLaval products and services into your DeLaval VMS[™] farm, you can rest assured that your VMS[™] solution is not only supported by the best team in the business but is also able to be scaled or configured to meet your farm's challenges.



Ensuring your VMS™ is delivering optimal results

Your new VMS[™] is going to operate about 8,000 hours per year. And like all other modern, hard working machines it needs to be regularly serviced. Preventive maintenance is done according to a service program with three Service visits per year. Our certified VMS[™] Service technicians are well trained on VMS[™] Series and they use Original Service kits and professional tools when they are testing the installation.

In case of emergency it is easy to reach our remote Support 24/7 all days in a week and the whole year around. You will talk to professional people that can help and you will be up running again.

TAKING A 360° VIEW



Animal Welfare

Pulsation, vacuum and liners working in harmony with your cows.



Farm Profitability

Service and Consumables at a fixed price, for easier budgeting and peace of mind.



Work Efficiency

Avoid unnecessary breakdowns and performance loss with timely servicing.



Food Safety

Cleaning performance and quality detergents help you achieve good milk quality.





SUPPORT

DeLaval has built more dairy solutions than anyone else on the planet. Not only that, it's all we do.

That experience, and 100% focus on dairy is your guarantee that if you choose from the DeLaval VMS™ Series you don't just get a robot – you get a total, integrated dairy system. A farming system designed to help you achieve:



TAKING A 360° VIEW



Animal Welfare

Improved udder and hoof health, increased longevity and fertility.



Farm Profitability

Helps ensure that dairy farming is a profitable option now, and an appealing lifestyle and career choice for the next generation.



Work Efficiency

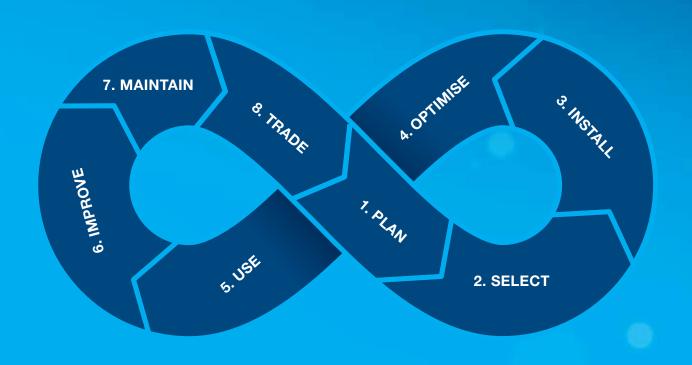
Routines, training and standard operating procedures to get the most out of your labour hours.



Food Safety

Every day, every milking, every cow; your VMS™ will help ensure that you are at the forefront of food safety into the future.

With you on every step of your VMS™ Series journey.



1. PLAN	You don't plan a new dairy system every day – but we do. Let us help you plan a system that will work for you, the way you want to work.
2. SELECT	Because VMS [™] is able to be customised, and other useful components integrated, specifying the perfect system for you is something we can help you navigate.
3. INSTALL	Our professional team will have your VMS™ installed, commissioned, certified and operating in no time at all.
4. OPTIMISE	It's not a matter of plugging your VMS™ in and leaving you to it. The process of getting you up and running is the key to a successful installation.
5. USE	With routines and standard operating procedures as well as expert advice always available we will help you get the most out of your VMS™ every day.
6. IMPROVE	Easily upgradeable, your VMS™ will become a hub for ongoing system improvements. Access to these recommendations is an integral part of VMS™ Series
7. MAINTAIN	Easily and quickly serviced, we will make sure that your VMS™ is maintained to ensure a lifetime of performance.

8. UPGRADE
One advantage of VMS™ is that it is easy to add additional units to meet growth, including options such as SCC & progesterone testing or even a Body Condition scoring camera to meet your farms needs.

Get even more out of your voluntary milking system with DeLaval.



Barn Planning

Cow traffic is essential to a profitable voluntary milking system. Our team of trained experts will help you design a solution tailored to your needs.



DeLaval Clover Liner™

With its clover-shaped concave walls, the unique patent-pending DeLaval Clover Liner provides optimal performance, advanced massage properties and gentle teat treatment.



DeLaval Online Cell Counter OCC

Take the guess work out of udder health management and make the right decisions in time, every time.





DeLaval Herd Navigator™

Instantly receive accurate analysis from every cow to improve your farm's profitability, work efficiency and animal welfare.



DeLaval Body Condition Score BCS Camera

Body condition scoring is essential to boost productivity, fertility and longevity – with a BCS camera you will accurately record every cow, every milking.



DeLaval OptiFeeding[™]

Regular frequent delivery of specific feed rations is essential for dairy farming success. Using automatic feeding systems to optimise feed management is a profitable investment.



Smart Selection Gate/Grazing Gate

Whether you operate a pasture based system, a barn, or a mixture of the two; the addition of a DeLaval Smart Selection Gate will optimise feed access and reduce the time spent fetching cows.



DeLaval OptiDuo[™]

To increase feed consumption don't just push feed around – refresh and remix it. OptiDuo is a fully automated solution.



Cow Comfort

Our cow comfort approach takes into account the entire needs of the cow around the clock to ensure that your herd gets the best possible treatment and stays healthy, strong and productive.



DeLaval OptiFeeder™

DeLaval Out of Parlour feeders are designed for the comfort of both farmers and cows. With Strong open design cows have easy access to accurately dispensed food.



Consumables

A full range of consumables designed and tested to ensure maximum performance from your DeLaval VMS™.

HOW CAN WE HELP?

Dairy farming is a business, and like all businesses there are pressures to produce more with less. But dairy farming is also a way of life, and how you want to farm is an important part of the decisions dairy farmers are making every day.

We don't believe that the DeLaval VMS[™] Series are the right systems for every farmer. Your history, your personality, the unique economic and environmental factors that you face will determine the best solution for you.

That is why if you are looking to farm with a voluntary system it is essential that you chose a partner who can help you take a 360° view of your whole operation.

A partner who has experience of every aspect of dairy farming.

A partner who can help you with how each variable element in your farm system will impact the others, and what their combined impact will be on your key objectives.

A partner who will help you create a system, that truly revolves around you.

THE NEXT STEP

To take the next step on your personal VMS™ Series journey, either talk to your trusted DeLaval representative or for more information,

visit us at www.delaval.com





delaval.com

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