DeLaval Parlor P500
A System Approach

IT ALL REVOLVES AROUND YOU
Wherever you farm, whatever your management routines and however many cows you milk – the central challenges you face are the same. How do I maximize milk yield and quality while minimizing the time it takes, and the costs associated with harvesting milk?

When we started the development process for the all new DeLaval Parlor milking system P500, we set out to make the best parlor we have ever made.

**Designed to deliver a smoother milking process**

We set out to make a safer, calmer, faster more comfortable and productive place for your cows and workers.

This document contains not just what we did, but also data from our test and pilot farms which prove that this is the very best Parallel Parlor we have ever created.

And given we have been manufacturing milking systems for well over a century, that is really saying something.
Taking a system approach – with you at the center of everything we do.
Animal Welfare
The DeLaval Parlor P500 is designed to move cows calmly and efficiently through the milking process.

Work Efficiency
The DeLaval Parlor P500 is an efficient system which drives the throughput you need. It is this efficiency that can help you to spend less time, milking more cows.
Food Safety
Calm healthy cows being milked with a gentle consistent process means higher quality milk and reduced mastitis.

Farm Profitability
With a smoother approach to the milking process designed to increase throughput, the DeLaval Parlor P500 makes it possible to do more with less.
WHY IS IT BETTER?

Whether you are building a new dairy, or retrofitting a new system into your existing barn – The DeLaval Parlor P500 has been designed to do more on a smaller footprint, making it an obvious choice for high throughput, high efficiency dairy farms.

Up to 30% reduction in overall platform width

Cow Comfort
Sequence Gates removed during milking

Data collected on test farms and pilot farms. Data compared to DeLaval Champion. Results may vary and are not guaranteed.

Robust, low noise, light weight sequence gates
made from industrial HDPE material
Quieter milking environment*

Up to *56% reduction in exit cycle time with DeLaval SynchroSweep™

ZERO obstructions at cow exit

96” (2438mm) max ceiling height requirement for DeLaval SynchroArc™

3 cow flow control options
The Key Features

It is the harmony of the key features of the DeLaval Parlor P500 that makes it the most advanced parallel Parlor we’ve ever created.
DeLaval SynchroControl™ provides more technology, more functions and more information so that your parlor can be operated safely, comfortably and efficiently.

DeLaval SynchroArc™ is so much more than an open-bottom neck rail with no obstructions. It has been designed to increase milking routine efficiency with a smaller footprint and fewer vertical space requirements.

DeLaval SynchroSweep™ features independently controlled, suspended, non-overlapping sequence gates. This design and process helps create a quieter environment that improves cow flow and cow comfort.

DeLaval DelPro™

The analytical and processing power to help you make better decisions.

DeLaval Training and Advisory

Expertise to make sure you get the full benefit from your DeLaval system, not just when planning, but throughout its lifetime.

DeLaval InService™ All-Inclusive

Added peace of mind to keep your system running at its optimum.
DeLaval DelPro™ takes all the data being recorded on your farm and does the number-crunching for you.

Instead of pages and pages of numbers and charts – you get valuable information, sometimes in the form of a single number or alert.

This useful, actionable information is delivered to you by whichever DelPro application is the right one for the task at hand. This means you may want the information in the office, the barn or pasture, while milking or even when you are with an advisor away from the farm. With DelPro you can even grant remote access to parts of your data to vets and advisors.

It is easiest to think of it as a hub for your dairy farm. Everything is fed into it via a range of inputs; DelPro processes and orders that data to allow analysis and reporting that is then delivered to you via a series of applications that make it easy for you to do more with the data than you probably thought possible.
DeLaval SynchroArc™ represents the most significant evolution ever made to our neck rail. Everything from the open bottle shaped design to the unique “up and away” action of the SynchroArc™ means you can load sooner, exit faster and milk with consistent indexing.

It all adds up to significant improvements in terms of throughput, cow flow and the calmness of the entire process.

Not only that, with a smaller footprint and significantly reduced requirement for vertical space, installation costs are reduced and retrofits become much simpler for most farms.

The open bottom design of SynchroArc™ encourages smooth cow loading.

Tailored for your herd cow size with 4 different stall setting options.

SynchroArc™ provides better indexing of mixed herd sizes.
With herd sizes and productivity pressures increasing, it is essential that your system can deliver more milk, more efficiently, with less hassle.

With our new DeLaval SynchroSweep™, we have brought 135 years of engineering experience to make sure cows move as quickly, calmly and efficiently through every DeLaval Parlor P500 as possible.

Designed and fabricated at our facility in Mt. Vernon, Washington, USA the team behind the Champion have set out to create the best parlor ever built, we believe you will agree that they have succeeded.

The key is separating the functionality of the sequence gate and the neck rail, and then designing our best solution for each. DeLaval SynchroSweep™ is the best sequence gate we have ever developed and it also adds a few new tricks to help you milk more cows, more quickly and more efficiently.

DeLaval SynchroSweep™ delivers a quieter milking process due to the non-overlapping design of the sequence gate.
DeLaval SynchroSweep™ allows sequence gates to be removed from between cows during milking providing reduced stress on cows and equipment.

DeLaval SynchroSweep™ provides an animal friendly method of encouraging cows to leave the milking platform in a timely manner.

DeLaval SynchroSweep™ is constructed using High Density Polyethylene to give you all the advantages of steel without the weight.
DeLaval SynchroControl™ is where everything comes together – and it all comes together where you milk.

The workspace of the DeLaval Parlor P500 is possibly the clearest example of our “it all revolves around you” design philosophy.

The objective was to create a system with more information, more automation, more functions and more technology than we’ve ever offered before – and to deliver it so that with minimal training, everything could be operated safely, comfortably and easily by fewer people.

With DeLaval SynchroControl™ everything is at your fingertips.
Choose between All-Exit/All-Index, All-Exit/Gang-Index or Gang-Exit/Gang-Index to suit your management style.

Gang-Index can help you start your milking routine faster.

Use one button to control the exit of the previous group and the loading of the next group.

Gang-Exit process allows smaller groups of cows to exit the parlor.
The DeLaval Parlor P500 is the central point of your total milking system. This means it is critical that the whole system from pre-entry all the way to exit and back to feed, is designed to maximise the productivity gains from your DeLaval P500. We know you don’t design a new system every day but our specialists do - and they will help you get the most out of your system.

Once your DeLaval P500 is up and running, the power of DelPro™ and the support of our training specialists and advisors will then make sure you get timely information and that your training, cleaning processes, milking routines and settings are adjusted to make sure you stay at full power.
We take a 360° view of your farm

Cleaning process evaluation

Project Planning and Design

Herd data management advisory

Milking routine Training
With a DeLaval InService™ All-Inclusive agreement in place for one agreed price we can provide your system with scheduled servicing to routine maintenance, detergents to liners, vacuum settings to lubricants, cleaning, advice and everything in between to help your system work in harmony with the goal of delivering more, better quality milk.

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, we’re helping your system perform to expectations.

Service and maintenance are included

Like any hard working system, your DeLaval Parlor P500 needs to be serviced at regular intervals for pre-determined actions, with DeLaval InService™ All-Inclusive, we will make sure these are performed on schedule.
Consumables are included

It’s not just the labor hours that are included in your DeLaval InService™ All-Inclusive agreement. We can help you achieve your udder health goals by helping you select the best teat dip to meet your needs. In addition, you can be assured that you will never run out of detergent, teat dip, 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 help you choose the right liners, correct vacuum and pulsation settings for your herd. We will also ensure your cleaning routines, water temperatures and dosing rates help you deliver quality milk.

Milk Quality is included

We can help you be sure that your detergents, liners, cleaning routines and pulsation settings are operating in total harmony to help you deliver better quality milk.

Certainty is included

The bigger the operation you have, the more complex it is to keep track of your production costs. With DeLaval 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.
Synchronize Your Routine

When everything works together your milking system delivers the smoothest calmest, most complete process from entry to exit that we have ever offered. That's why we call it synchronized milking.
Cows
entrance gate open
Arc lowered
Sweep lowered
Sweep lifts
Start milking
Perfect udder presentation
Indexing of gang
Cows complete a gang
Cows enter
End milking
PUTTING IT ALL TOGETHER

Managing a dairy is complex business. Success requires a system that manages the milking process as simply as possible. A system that manages the interactions between different processes and inputs to help you generate more, better quality milk from healthier cows.

The DeLaval Parlor P500 features adjustability during installation for different breeds, providing your herd our most comfortable fit possible. During milking the DeLaval SynchroArc™ provides the ability to index different breeds and sizes in your herd.

All this can add up to fast, less costly installation, which means that you can experience a faster pay back for all your hard work.
Designed for productivity

Managing the smooth movement of cows from feed to the milking parlor and back again is key to the performance, not only of your parlor, but of your entire farm.

The DeLaval Parlor P500 is a high throughput, fast and efficient milking system. To ensure the cow flow that makes this possible, the pre-entry phase has been designed to support the swift and simple movement of cows, with minimal worker involvement to create a system that minimizes the time your cows spend waiting to be milked. This reduction in non-productive time, means more time feeding and ruminating – which results in more productive cows.

Taking a 360° View

**Animal Welfare**
Comfortable surfaces as well as a reduction in stress at entry means healthier, more productive cows.

**Farm Profitability**
The ability to increase throughput as well as improve cow productivity.

**Work Efficiency**
Eliminating the time wasted fetching animals means more time on important tasks.

**Food Safety**
With the reduction in stress comes a direct improvement in milk quality.
It all adds up to high throughput for faster, more effective milking

**Crowd gate**

Our Holding-pen Reduction Systems keep the cows calmly at the entrance of the parlor ready to enter with minimum labour.

“A study of parlor efficiency by DeLaval showed that a 400 milking cow farm would save approx. 240 hours/year of labor time by installing a crowd gate.

**DeLaval DelPro™**

With DelPro companion you receive alerts well before entry so that you can carry out any interventions before entry to avoid slowing the process down.

¹DeLaval study of 16 U.S.A parlor farms.
The time it takes to get your cows loaded and ready for preparation and attachment sets the pace for everything in your milking routine. The DeLaval Parlor P500 is designed to make entry fast.

This means loading the cows quickly and efficiently into a position that allows for consistent preparation and milking routines. It means minimizing the requirement for physical maneuvering of cows, and it also means taking into account how the cow is presented to the milkers.

Basically, the less the milkers has to do at entry the better, because their time is better spent on the productive tasks of preparation and milking.

Animal Welfare
Surfaces to help improve hoof health as well as a reduction in stress at entry means healthier, more productive cows.

Farm Profitability
Fast smooth entry means fewer disruptions to routines for operators.

Work Efficiency
A fast, safe entry means you can milk more cows with fewer labour hours.

Food Safety
Cows are positioned for superior processes, and because they are calm, there is less waste produced.
The key elements that deliver a faster entry

**Entrance lane**

It starts with a v-shaped entrance designed to quickly guide cows from the holding pen to the parlor.

The vertically mounted butt pan, wide entrance lane and adjustable stall size encourage cows to flow calmly and efficiently down the cow platform during loading.

**Non overlapping DeLaval SynchroSweep™ sequence gates**

The DeLaval SynchroSweep™ features independently controlled, suspended, non-overlapping arrow sequence gates. These create a quiet environment, which could improve loading and reduces the chance of short loading. And because they are able to be in loading position before the DeLaval SynchroArc™ is lowered, individual gangs are able to be loaded much sooner.

**DeLaval SynchroArc™ bottle shaped neck rail**

Featuring an open bottom design, not only does the DeLaval SynchroArc™ improve visibility for cows as they enter, it is also comfortable for the cow to simply walk into the neck rail in her natural position. The unique bottle shape of the neck rail makes contact with the shorter and taller cows in the proper position on their body to comfortably index. This means that the cow is correctly placed for milking attachment. And the open bottom helps prevent the cow’s neck from getting hooked under the neck rail at exit.

**Better, more consistent loading**

The unique open bottom bottle shape of the DeLaval SynchroArc™ allows cows to naturally enter the stall with their heads down. The neck rail features a “load position” that provides each cow additional space to turn into her stall. Once the cows are comfortably indexed preparation and milk attachment can be done efficiently.
PREPARATION

Good preparation is the key to quick milk let down, udder health and milk quality. The DeLaval Parlor P500 presents your cows so that you can prepare to succeed.

Better by Design

We all know that preparation is critical to the success of any milking routine, but too often shortcuts are taken to speed up the process. With the DeLaval Parlor P500 the loading and indexing of cows is so seamless and consistent that you have more time for optimal preparation while reducing overall time per parlor side.

Better Butt Pan design

When cows are indexed, the unique design of the butt pan allows milkers to safely get closer to the udder.

Better, safer routines

Because the cow is more comfortable at the start of milking, and in the best position for preparation, it is possible for workers to be more consistent with their milking routines.

Better results

Your preparation routines can now focus on optimizing the cows' milk let down, milkflow and udder health because of short waiting times and an overall calm milking environment.

TAKING A 360° VIEW

Animal Welfare
With DeLaval DelPro™ each cow is recorded individually to help meet her needs.

Farm Profitability
Better hygiene and superior stimulation can help you achieve your best yield.

Work Efficiency
The P500 offers perfect presentation of relaxed cows with comfortable and easy access for milkers.

Food Safety
Superior udder preparation and stimulation can help improve milk quality.
Better Indexing

Effective indexing is perhaps the single most important factor to ensure cows are presented correctly for efficient preparation and attachment. The DeLaval Parlor P500 takes indexing a step further thanks the unique DeLaval SynchroArc™ and DeLaval SynchroSweep™ systems which make it possible to quickly and consistently load and index gangs of cows to ensure prep routines can start earlier.

- Cows enter stall
- Gang is loaded
- Index first gang
- Start prep routine
- Index next gang of cows
- Continue process for rest of parlor side

Better Results

- Cow is more comfortable
- Milker more comfortable
- Better milk letdown
- Better milk flow
- Potentially more milk per cow per milking
- Potentially more cows per hour
- Potentially more profit
Helping you harvest more, better quality milk

Nearly 40 years ago we began designing and building high throughput parlors at our manufacturing facility in Washington, USA. The DeLaval Parlor P500 applies everything we have learned about milking and cow behavior to make the P500 the best parallel parlor we have ever produced.

Animal Welfare
Removing the DeLaval SynchroSweep™ during milking is designed to create a more comfortable milking experience for your cows.

Farm Profitability
Consistent milking routines can increase yield per labour hour.

Work Efficiency
Superior indexing combined with a lighter, more ergonomic cluster makes attaching fast and easy.

Food Safety
DeLaval TopFlow™ technology reduces flooding and cross contamination.
More Comfortable
The DeLaval SynchroSweep™ independently controlled, suspended, non-overlapping sequence gates can be completely retracted once the cows are milking. This creates a more comfortable and natural standing position for your cows. Wear and tear is also reduced which can improve maintenance costs.

The non-overlapping sequence gates reduce parlor noise, giving the milking labor a more comfortable work environment.

More Control
The mounting of the butt pan, positioning of the cluster, and LED lighting provide excellent visibility for milkers, which means better prep and milking routines.

The DeLaval Parlor P500 provides more information, more automation, more functions and more technology than ever before. With multiple networked PLC based stall controls, DeLaval SynchroControl™ puts you in control of all that power so that you can operate everything more safely, comfortably and easily.

More precise
The DeLaval Parlor P500 and DelPro are designed to ensure the best milking routine for your herd. Using accurate flow data you can set parameters that are customized to your herd.

More information
The DeLaval Parlor P500 is designed to harness and apply the power of DelPro™ Farm Manager to drive performance. As well as the example above, because the DelPro™ Farm Manager captures and records performance times (such as the start of entrance gate opening, the start of ID’ing, first unit on, unit on times and end of all units off). DelPro can also do things like measure the efficiency of the work routines in the Parlor.
Once your cows have been milked and post-dipped, the key is to get them back to feed and to clear the area to make room for the next cows waiting to be milked.

It’s all about flow - not just of cows - but also of the system.

Animal Welfare
DeLaval SynchroSweep™ helps cows safely and calmly exit from the cow platform.

Farm Profitability
Faster throughput means more milk harvested per hour.

Work Efficiency
Superior cow-flow means fewer disruptions, leaving operators focused on milking.

Food Safety
Cow platform and gutter flush can be activated after exit to ensure a clean parlor for the next batch.
Fast
Traffic jams are caused by cows exiting all at once into narrow exit lanes. Gang-Exit allows smaller groups of cows to exit immediately once milking is complete alleviating exit lane congestion. DeLaval SynchroSweep™ gently guides any lingering cows off the cow platform to enable quicker loading of the next batch.

Less Space required
The unique space saving action of the DeLaval SynchroArc™ requires less space both horizontally (up to 30% compared to conventional swing up neckrails) and vertically (only 96” height) - making retrofitting of the new DeLaval Parlor P500 into an existing barn a realistic and cost effective option. The Gang-Exit functionality also allows for retrofitting in barns where exit lanes are narrow.

Gang-Exit
The fewer cows in the exit lane, the faster they merge and move out of the exit lane. Gang-Exit allows you to release smaller gangs of cows which means at the end of your post-treatment routine you are only exiting the last gang – not the whole group, which speeds up the process and reduces congestion and in return alleys. Using a DeLaval Sort Gate gives you, your milkers and your cows a low stress and automatic way of efficiently handling individual cows for post milking observations and routines.

The unique action of the DeLaval Parlor P500 at exit creates a faster, safer exit routine, which seamlessly prepares the platform for the next cows as they enter.

One Touch Exit
With Exit Plus, the entrance gate, DeLaval SynchroSweep™ and DeLaval SynchroArc™ are controlled automatically.

This fully automatic process means that the milker can focus getting ready to milk the next group.

• If you prefer to stick with All-Exit/All-Index and/or manual operation – that’s OK too – after all, with the DeLaval Parlor P500 – it all revolves around you.
Your quick guide to a retro fit

The key factors that require a new barn to be built are typically the ceiling height required for front exit stalls, and the extra width required for smooth cow exit.

The DeLaval Parlor P500 overcomes these issues, which means often you can install a new DeLaval Parlor P500 within an existing barn. This flexibility, combined with a revolutionary bolt-together design and the elimination of floor mounted sequence gates means it may be possible to manage a full retrofit installation between milkings.
With you on every step of your DeLaval Parlor P500 journey.

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<th>Step</th>
<th>Description</th>
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<tr>
<td>1. PLAN</td>
<td>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.</td>
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<td>2. SELECT</td>
<td>Your DeLaval representative has access to tools which will ensure that the system you order is configured to deliver exactly what you want, every time.</td>
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<td>3. INSTALL</td>
<td>Our professional team will have your DeLaval Parlor P500 installed, commissioned, certified and operating to your standards.</td>
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<td>4. OPTIMIZE</td>
<td>It’s not a matter of installing your DeLaval Parlor P500 and leaving you to it. The process of getting you up and running is the key to a successful installation.</td>
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<td>5. USE</td>
<td>With routines and standard operating procedures as well as expert advice always available we will help you get the most out of your DeLaval Parlor P500 every day.</td>
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<tr>
<td>6. IMPROVE</td>
<td>Easily upgradeable, your DeLaval Parlor P500 will become a hub for ongoing system improvements. Access to these recommendations is an integral part of Parlor P500.</td>
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<tr>
<td>7. MAINTAIN</td>
<td>Easily and quickly serviced, we will make sure that your DeLaval Parlor P500 is maintained so it can operate at its prime.</td>
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Reliability is about designing it smart and building it tough, but it is also about making sure that when something does require a service or maintenance, that task is quickly and easily performed. Our U.S parlor engineers used all their experience building parlors to create a system as smart is it is strong.

**Smart**

The design of the DeLaval Parlor P500 cabinetry protects sensitive equipment such as pulsation and milk meters from the harsh environment of the parlor.

We have also used technologies that are easily understood and serviced, an example of this is the use of air cylinders – these are a commonly used item in machinery on every dairy farm, which makes maintenance simple.

**Tough**

The DeLaval Parlor P500 is built to last in the most demanding dairy environments: With strong rectangular beam construction, no steel on steel wear points, heavy-duty air cylinders, pipes in place of tubes, durable cluster and claw combinations and robust, low voltage controls.

**Protected**

Not only does the design protect service parts, but our comprehensive 3-year warranty included in our DeLaval InService™ All-Inclusive contract on all stalling parts protects you too.

**Animal Welfare**

Udder health is improved when liners, settings and detergents are functioning together.

**Farm Profitability**

Costs are known up-front allowing for precise budgeting.

**Work Efficiency**

Because your system is kept running efficiently labor hours are not wasted.

**Food Safety**

Everything working together to protect the quality of your milk.
DeLaval Parlor P500 never stands alone. Neither will you.

InService™ All-Inclusive

With a DeLaval In-Service™ All-Inclusive contract in place, you can rest assured that every part of your system from scheduled servicing to routine maintenance, detergents to liners, vacuum settings to lubricants, and everything in between; is working in harmony to help you achieve, better quality milk. Which means you can budget with total confidence.
Get even more out of your DeLaval Parlor milking system P500.
**Milk Cooling**

DeLaval milk cooling systems are designed to protect milk quality by quickly and efficiently cooling your milk.

**DeLaval Clover™**

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

**DeLaval Body Condition Score BCS Camera**

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

**Sort Systems**

Designed to reduce daily labor demands by automatically sorting the cows that need your attention.

**DeLaval OptiDuo™**

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

**Consumables and Services**

A full range of consumables designed and tested to help you achieve maximum performance from your DeLaval Parlor P500.
If you’re looking at your options for a new milking system, the first step is deciding which of the many options will deliver the best results for you. We honestly believe that the best place to start that conversation is with us, after all – we are a world class company designing and manufacturing milking system and management solutions that work hard for you.

That means that we will recommend the system that is right for you, not the system that is right for us.

With 135 years experience in the dairy industry you can also be certain that our team will help you manage the process of designing, installing and optimizing your system to help you meet your budget and performance targets.

Creating solutions for dairy farmers is what we do, and it’s all we do.

Which is why you can be sure that with a DeLaval solution – It all revolves around you.

THE NEXT STEP

To take the next step talk to your trusted DeLaval representative or visit us at www.delaval.com
IT ALL REVOLVES AROUND YOU
We live milk