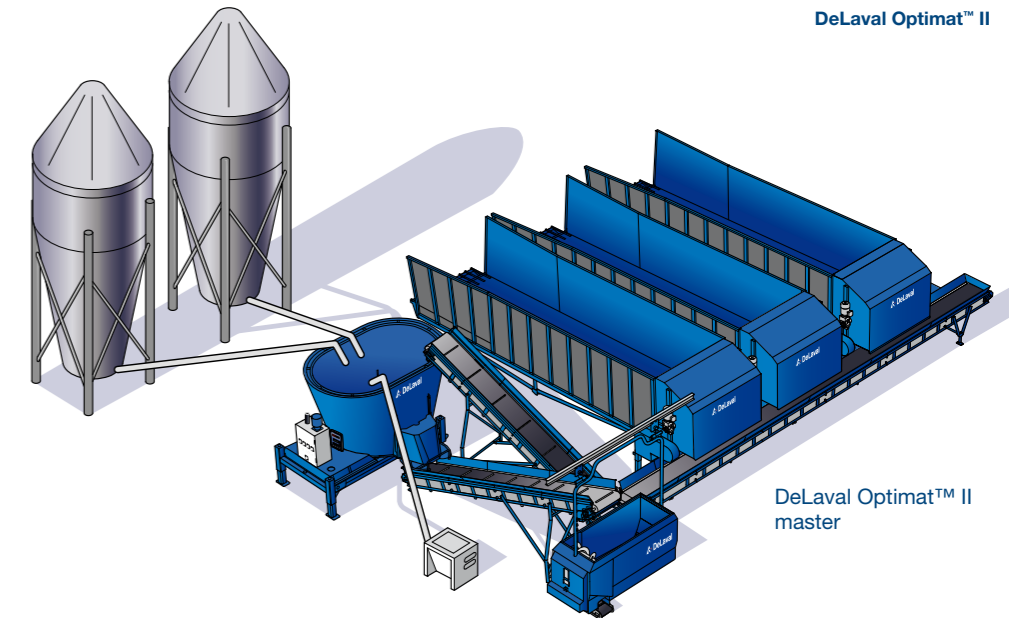


DeLaval Optimat™ II – gain more time and cut your biggest cost





DeLaval Optimat™ II system



DeLaval Optimat™ II master

See feeding as an opportunity

DeLaval Optimat is a feeding system that will reduce your work load by hours every day. It will also give you control over the relationship between feed and milk yield. In other words, it can help you cut costs, while boosting output.



Automatic feeding

DeLaval Optimat is a feeding system that will reduce your work load by hours every day. It will also give you control over the relationship between feed and milk yield. In other words, it can help you cut costs, while boosting output.

Save hours every day

The feeding process with its loading, mixing and distributing can take several hours a day. Experience shows that you can save 1.5 hours every day with a herd of 120. In practice this means that with automation, feeding can take as little as 30 minutes a day (depending, of course, on the kind of farm).

The benefits are clear: reduced labour costs, plus more time for other jobs around the farm – and for your family.

Frequent feeding

If you are feeding your animals just once or twice a day, you run the risk that low-ranked cows will not get enough to eat, and more dominant cows too much. But by distributing feed more accurately, you can cut the amount of waste substantially.

Frequent and accurate distribution of fresh feed can help increase dry matter

intake by 2-5%. This means you can reduce feed costs and at the same time help your cows reach their full genetic potential.

With frequent feeding, you can ensure the right balance for each group of cows depending on their performance and stage of lactation. Frequent feeding also reduces the risk of under- or over-feeding.

Finally, frequent feeding has a positive impact on cow traffic. This is especially important in farms with DeLaval voluntary milking systems (VMS) where Optimat will help VMS users get the most out of their system.

Manage and reduce feed costs

Not only will DeLaval Optimat help you reduce costs, it will actually help maximize income per litre of produced milk. This is how:

- By automating feeding you can save time and labour costs
- Optimat takes less space in your barn compared to a conventional set-up with mixer wagons, thus saving on building costs
- Energy costs will shrink since Optimat requires much less energy compared to a mixer wagon pulled by a tractor

- You will make big savings on feed – especially expensive concentrate and minerals. This is because Optimat eliminates over-loading thanks to accurate mixer loading
- You can make considerable reductions in feed wastage thanks to frequent and precise feeding

By integrating feeding with DeLaval herd management system you gain control over milking performance and feeding. And this allows you to optimize feed costs and milk yield.

DeLaval Optimat consists of a number of modules which let you piece together a system that best fits your needs. While each module is designed to handle a specific stage of the feeding process, together they create a chain that covers the entire process. Behind each module stands the Optimat promise: each module has been designed to do one job, and to do it in the best way possible – no compromises.

Stationary mixer

The mixer is the heart of the system. All feed ingredients are weighed and loaded into the stationary mixer before the thorough cutting and mixing process starts. Precise batches are prepared for further distribution.

Distribution wagon

The job of the distribution wagon is to provide each group of animals with the proper amount of feed several times during a 24-hour period.

Buffer table

With DeLaval Optimat, you only have to load the buffer table once a day, depending on farm size and type of buffer table.

Roughage is loaded onto the buffer table which automatically moves feed blocks to the shredder. The shredded feed is then loaded onto a conveyor for subsequent distribution to the stationary mixer.

Feed conveyor

The job of the feed conveyor is to load feed into the mixer and then from the mixer into the distribution wagons. An Optimat system can include one or several conveyors.

Control system

Together with the weighing equipment, the control system manages the different modules that make up Optimat. Safety has been hard-wired into each Optimat module, on top of which the control system adds an extra level of safety.

Optimat is available in three main configurations:

With Optimat you can add new levels of automation when you are ready for them. It even lets you use equipment you already have on your farm.

A. DeLaval Optimat™ II standard

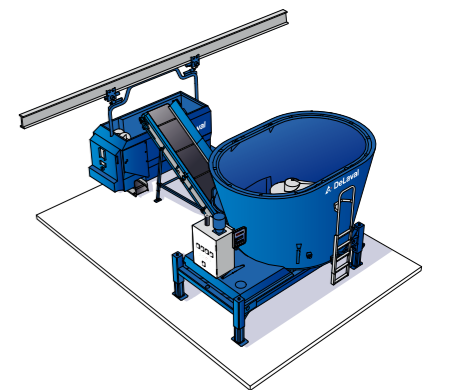
With Optimat standard, loading is performed manually while mixing and distribution is done automatically. This set-up includes a stationary mixer, conveyor and distribution wagon. With Optimat standard, you gain the benefits of frequent feeding while taking your first step on the way to a fully automated system.

B. DeLaval Optimat™ II master

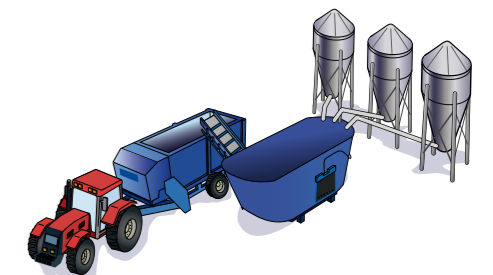
Provides fully automatic loading, mixing and distribution. Optimat master offers the possibility to programme recipes, groups and schedules.

C. DeLaval Optimat™ II feed centre

The configuration for larger installations where larger batches can be prepared in a big stationary mixer and feed is distributed manually. The system can include a stationary mixer, conveyors, buffer tables and a control system.



DeLaval Optimat™ II standard



DeLaval Optimat™ II feed center

No compromise in performance and feed quality

Mixing

A stationary mixer and weighing system are the heart of DeLaval Optimat.

With DeLaval stationary mixers you get a well cut and mixed ration with the right structure day after day. A ration that is so well mixed that cows can not only pick out the bits they like best. When it comes to feed quality, there is no room for compromise.

DeLaval vertical stationary mixers VSM

The vertical stationary mixer, you get a robust mixer that handles all types of forage including entire round bales. The thorough cutting and mixing creates a fluffy, high quality mix. The mixers are equipped with a frequency-controlled electric motor that optimizes energy use.

The mixer can be equipped with up to two unloading doors.

The 8m³, 10m³ and 12m³ mixers fit in well with DeLaval Optimat master.

Vertical stationary mixers are available in the following sizes: 8m³, 10m³, 12m³, 16m³, 19m³ and 22m³ with 30 and 37kW motors.



Vertical stationary mixer VSM with conveyer



Horizontal stationary mixer HSM

DeLaval horizontal stationary mixers HSM

Horizontal stationary mixers from DeLaval are fast and efficient. The cutting and mixing is performed in a fast and controlled way with three augers working horizontally.

The horizontal stationary mixer is available in 12m³ and 17m³ sizes.

Motor: 30kW frequency controlled



OTS100, Feed conveyors, VSM

System integrated distribution

Frequent feeding with forage is key to increasing milk production and profitability. With DeLaval distribution wagons you can feed your cows several times per day. And with exactly the right amount to each and every group of animals.

When the mixer is ready, the feed wagon will distribute the right amount of the right feed to each group – several times a day. With a stationary mixer, the distribution wagon is free to deliver feed and does not use time and capacity for mixing. This is another example of our no-compromise approach.

DelPro™ integrated distribution wagon

DeLaval feed wagon OTS is a compact, hygienic and service-friendly solution for evenly distributing forage to your herd, even in narrow places. It can be operated as a stand-alone solution or as an integrated part of DeLaval herd management system DelPro.

DeLaval OTS is a battery-operated feed wagon that distributes the right amount of feed on a weight basis. The wagon automatically distributes feed, adjusting the amount to each animal group. For large installations, the forage shuttle can be equipped with a double-battery pack to increase the wagon's operational time.

Power: Battery
Rail dimensions: from IPE120 to IPE240
Rail height: 2.5-4 metre
Feed table width: up to 2.3 metre

DeLaval feed wagon RA135

DeLaval RA135 is a durable, automatic feeder with high capacity. The wagon offers a capacity of up to 3.7m³ and is mains operated. DeLaval RA135 is simple to use and can be programmed directly on the PLC unit installed on the wagon.

Power: 400V, with cable or power-rail
Rail dimensions: from IPE120 to IPE240
Rail height: 2-3 metre
Feed table width: up to 3 metre

Feed conveyer

Feed conveyors from DeLaval are equipped with efficient, heavy-duty electro-drive motors that are controlled by the Optimat system. The conveyors are available in different lengths and are placed horizontally or raised at an angle. The same type of conveyor is used for loading feed into the mixer and for unloading into the distribution wagon. The conveyors feature two different speed settings to provide the best performance and flow.

Length: 3-11 metre
Lifting angle: max 40°
Motor: 2.2kW integrated in the drum
Speeds: 48m/min and 60m/min



Distribution feed wagon OTS



DeLaval feed wagon RA135



DeLaval buffer tables in high angled position



DeLaval buffer table in "low" horizontal position

DeLaval buffer tables

A buffer table is temporary storage area on to which roughage is loaded. A built-in bottom mat then transports the roughage to a shredder. The shredder "grabs" portions of the roughage and feeds it onto the feed conveyor for further transport into the stationary mixer.

The advantage with this set-up is that you only need to fill the buffer tables once a day, or even once every second day (depending on the configuration). After filling the buffer tables, the system will automatically portion and distribute the roughage.

You can load loose roughage or blocks of different types of roughage. The shredder runs at a slow speed and gently moves the feed while preserving roughage structure which is vital for high productivity. By stacking the blocks tightly together you can minimize oxidation.

With a remote-controller you can easily control the bottom mat movement during refilling of the buffer table.

DeLaval buffer tables can be positioned in "low" horizontal positions or "high" angled ones, depending on requirements and farm conditions. The buffer tables come in various sizes: 4-9m long, 2m wide and 1.1 or 1.4 m high. The powerful electric motors together with compact heavy-duty gears provide long service lifetime.

No compromises have been made when it comes to reliability and durability.

Options

With DeLaval auger systems you can add the precise amount of any concentrate to rations prepared in the mixer. By connecting the auger to the Optimat control system everything will be managed automatically.

If, in addition, you add DeLaval mineral silo, you get automatic dispensing of precise dosages of minerals into the mixer where the feed batches are prepared.

Integrate with DelPro™ herd management

DeLaval feed wagon OTS can be integrated with DelPro™ management system giving you control over the connection between milking performance and feeding. In other words, it allows you to optimize milk yield.

DeLaval scale SI700 is the "brain" of the Optimat control system. Once all feed ingredients, rations, animal groups and schedules are programmed, the control system manages each module in the Optimat system.

Uncompromising safety

The controlled modules include the stationary mixer, distribution wagons, conveyors, buffer tables and auger systems. The modules and the system itself are all CE certified. Safety is hard-wired in Optimat with warning signals, start-up delays and safety switches positioned throughout the system. We make no compromises: safety is paramount.

From feeding to full management system

DeLaval can provide you with a full dairy management system: from feeding, milking and cooling, to manure handling and barn environment control. We can help you with planning, set-up and layout, and then follow the whole project all the way through to start-up.

And then of course, we are always on hand to make sure everything is working to your satisfaction.

Individual concentrate feeding

Add DeLaval Feed Stations FSC40 or FSC400 to the Optimat™ system and you can provide concentrate to each cow individually.

This allows you a PMR set up where roughage/TMR is handled with the Optimat™ II system and the additional concentrate is provided to each cow in the Feed station



Scale and control system



DeLaval feed wagon OTS100 and conveyor



Feed station FSC 400

Country 1

Address line 1
Address line 2
Address line 3
Tel XX XXX XX XX
Fax XX XXX XX XX
e-mail address
web address

Country 2

Address line 1
Address line 2
Address line 3
Tel XX XXX XX XX
Fax XX XXX XX XX
e-mail address
web address

Your DeLaval dealer

Don't take our word



"With Optimat master, we have been able to optimize use of roughage. The stationary mixer has been a decisive factor in helping us achieve the best possible quality of our mixed feed.

We already had a DeLaval automatic milking system and after installing Optimat we noticed an increase in roughage intake. With the well-mixed rations and frequent distribution, the herd gets plenty of activity. Plus, low-ranking cows have the opportunity to prove their ability now that they are also getting enough feed.

Ultimately we hope to grow into a company with 140 cows, plus young stock. And we want to carry on being able to give our cattle enough attention. DeLaval has the product range that is letting us prepare for the future, while maintaining a social life. Now it takes just one hour every second day to load the buffer tables, and that's it.

After all, there's more to life than work!"

HANS AND ALIE GRIJSEN, NIEKERK, HOLLAND



"Torp Farm is located in southern Sweden. It has four DeLaval VMS robotic units and a complete Optimat master system. Patrik is presently milking 300 cows. The farm also has approximately 200 young stock.

The feeding system I needed had to be fully automatic, have the capacity to handle up to 500 animals and be robust and reliable. Feeding on my farm used to take me four hours every day, now it takes just 30 minutes!

Optimat has improved cow traffic in my VMS system with the cows averaging 2.7 visits per day. A definite advantage with Optimat is that it can handle both of my barns – one which is for milking cows and one for my young stock.

The frequent feeding that Optimat has made possible has resulted in higher feed intake and more milk. Today, my cows' milk yield is around 10,000 litres."

PATRIK JOHANSSON, TORP FARM, SWEDEN