

Reduce the  
breeding period

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A shorter breeding period results  
in increased lifetime production.

Tailor-made portions  
for each calf

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The benefit of unlimited access to  
milk portions adapted to the calves'  
age and needs.

Healthier calves  
thanks to automation

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Smart software grants you real-time  
insights into the drinking behavior  
of your calves.

## Calf feeding system

Lely Calm



*For optimal growth and development  
from calf to dairy cow*



[www.lely.com](http://www.lely.com)



*“Within a week I can  
have a calf trained.”*

—Christina Carmichael,  
Owner-Operator, Cedar Grove Farm, Hersey, MI

***Your breeding strategy has a significant impact  
on your results***

Unlimited access to freshly prepared milk from birth to weaning pays off. Lean muscle and skeletal growth is positively influenced by the ability to consume milk as nature intended. The Lely Calm automatic calf feeder gives the ability to fine-tune growth rates and optimize meals to ensure healthy, well grown calves that translate to high producing dairy cows or steers.

This enables the correct and gradual development of a healthy rumen and growth in general. More specifically, heifers mature more quickly and vitality, fertility and milk yield are positively affected during the entire life of the dairy cow.

Automating calf feeding lets you benefit from more than just faster growth. The automatic calf feeding system also does away with repetitive tasks and heavy labor. The Lely Calm makes your calves healthier and stronger and your day more flexible.

***Smart feeding works***



## *A smooth transition from milk to solid feed*

By nature, calves drink several portions of milk from their mothers throughout the day. Both the stomach content and development are adapted to that natural drinking behavior. The unlimited opportunity to drink fresh milk at the right temperature allows calves to grow optimally during the early part of their life. It positively influences the vitality, fertility, milk yield and lifetime of a dairy cow.

### **Double the birth weight**

The first month of life is extremely important for healthy calf growth. In fact, it needs to at least double its birth weight in those first seven weeks. This can only be achieved if the calf can drink up to 12 liters a day, throughout the day. In the end, this not only leads to gaining weight on a daily basis. It also results in good rumen development and high feed consumption at a later stage.

### **Reduce milk, increase dry matter intake**

After the first 35 days, the milk supply can be reduced to zero by day 70 of the calf's life. During weaning we can gradually reduce milk consumption allowing for an optimal gradual increase in the intake of roughage and concentrates. By slowly increasing the portions of roughage and decreasing the portions of milk, the rumen develops gradually and in a healthy way. In addition, a weaning dip and stress are avoided by letting the calf slowly get used to less milk and more roughage.

### **Rumen development**

Rumen development occurs in response to the presence and fermentation of feed in the rumen. Feeding hay influences the rumen volume, while rumen papillae development is stimulated by concentrates.

### **Increased milk yield**

The faster a calf grows to the ideal weight, the faster she is ready for insemination and milk production. Research shows that calves fed intensively have a significantly higher milk yield than conventionally fed calves.

Study	Milk yield
Denmark (Foldager and Krohn, 1994)	+ 1,402 kg
Denmark (Foldager et al., 1997)	+ 519 kg
Israel (Bar-Peled et al., 1998)	+ 454 kg
USA, NY (Ballard et al., 2005)	+ 700 kg
USA, MI (Davis Rincker et al., 2006)	+ 499 kg
USA, IL (Drackley et al., 2007)	+ 835 kg
USA, MN (Chester-Jones et al., 2009)	+ 998 kg
<b>Average</b>	<b>+ 772 kg</b>

*“If you can operate a cell phone, you can figure out the Lely Calm.”*

—Casey Sparks,  
Owner, Sparks Quaker Acres Fremont, MI



## *Benefits of automated calf feeding*

Feeding the calves more frequently most closely aligns with their natural drinking behavior. Automating frequent calf feeding can be done with a calf feeding system. This brings many benefits to the dairy farm: healthy growth of calves, optimal hygiene, labor saving and it prepares the calves for their future.

### **Healthy growth of calves**

The capacity of the abomasum is limited to 1.5 liters to 2 liters per portion. Providing multiple smaller portions during the day, rather than having a bucket of milk in the morning and one in the evening, improves milk intake and digestion. This results in better use of all nutrients and a higher daily weight gain.

### **Optimal hygiene**

Feeding through an automated calf feeding system improves hygiene and animal health in general. Rather than cleaning buckets and teats manually, automatic calf feeding systems handle the cleaning themselves. By thorough cleansing and rinsing a few times a day with proper cleansers, the growth of bacteria is limited. The cleaner the system, the better it is for the calves.

### **Labor saving**

No more filling of milk buckets. No more lifting of heavy buckets and manual feeding of the calves. No need to clean all feeding utensils on a daily basis. That is what an automated calf feeding system takes away. As a result, the working day is more flexible, leaving more time to be spent on other things on the dairy farm.

### **Catch them young**

Group housing helps calves to learn how to behave in a herd. Even in their early days, calves get used to competition and dominance. When calves learn to walk into a drinking box for the milk, they will also walk into a milking robot more easily when they are older.



# Lely Calm

## For improved animal health

The Lely Calm automatic feeding system is for all farmers who care for their calves' health. By supplying small and exact age-appropriate portions, calves develop into strong and healthy dairy cows that are vital, fertile and productive throughout their entire life in the barn.

### The benefits

Feeding with the Lely Calm results in healthier calves and, in the end, productive dairy cows. Both are the direct result of:

- Unlimited access to freshly prepared milk in small portions, consistently concentrated and at the right temperature
- Uninterrupted drinking through simultaneous preparation and feeding

The Lely Calm also provides a high throughput and mixing rate. This results in good weight gains, even with a large number of calves to be fed. Through smart software, you have a perfect insight into the milk intake. Additionally, the Lely Calms a made-to-measure feeding system thanks to a wide range of accessories.

### The machine

The automated feeding system consists of several parts that together provide the previously mentioned benefits:

1. A feeder, available in two models, each in several versions. Both models include standard equipment with several additional options for even more advantages.
2. A drinking station consisting of a hygiene box, reader and teat unit.
3. Detergents for daily cleaning to ensure excellent hygiene.
4. Smart software to give you a real-time insight into the drinking behavior of your calves.



## Meeting your calves' needs

The Lely Calm automatic calf feeder is an extremely versatile system. Capable of utilizing multiple feed types, the Lely Calm can also be adapted to fit your rearing program. With customizable options for extra cleaning, greater hygiene or richer data-points, the Calm works seamlessly in your operation. Whichever configuration you choose, you will benefit from healthy and strong calves.

### Milk replacer and fresh milk

Both models are available for use with milk replacer only or with a combination of milk replacer and fresh milk.

The Lely Calm is Internet capable as standard and comes equipped with an Ethernet port. Another standard feature is the feeding pump that can be operated from the feeding station for easy training of calves.

Both systems are fully automatic.



## Options

While the Lely Calm is a complete feeding system by itself, customization makes it unique to your farm. There are a range of options and accessories to make feeding calves even easier.

### Automatic calibration

Available for Powder and Combi feeders only. The calibration scale beneath the mixing jar automatically calibrates the feed components during feeding and adjusts them accordingly.

### Fly protection door

To guarantee freshly prepared milk, the fly protection door prevents flies from getting into the feed. The perforated surface ensures optimal air circulation.

### Additive dispenser and second detergent

The dispensers for powdered and fluid additives dispense feed additives and electrolytes in precise doses individually per animal and are fully automatic. The second detergent guarantees excellent hygiene for the dispensers. Automatic cleaning takes place with acidic as well as alkaline detergents.

### Electronic scales

Regular weighing of calves gives additional insight into their development. The electronic half-body scales weigh the calves automatically during feeding and log their weight development.

### Concentrate feeder

The concentrate feeder documents each calf's concentrate consumption and enables animal-specific weaning depending on the feed intake. This guarantees a deeper insight into the calf's health.

# Easy-to-use and hygienic drinking station

The drinking station is the connection between the calves and the Lely Calm. The calf comes here to drink freshly prepared milk at just the right temperature. It is not only easy for the calf to learn to drink from, it saves time by the automated daily cleaning of each calf.

## Reader for tailor-made portions and insights

The drinking station is equipped with a reader that connects with the calf's tag. Through this reader and tag, the Lely Calm knows the calf's precise needs and guarantees that it drinks a tailor-made portion of fresh milk. All data on the number of liters of milk drunk, drinking frequency, etc., is stored and accessible through smart management software. In this way, you have a clear insight into your calves' drinking behavior. It also allows you to check up on calves if the data shows any deviation in drinking behavior.

## HygieneBox

The most important element of the drinking box is the HygieneBox. This box extends the Lely Calm with a fully automated cleaning process for the feed supply tube and the feeding teat. The calves enjoy freshly made, high-quality milk while you enjoy the time saved, since the daily routine of cleaning is taken in hand.

The HygieneBox is designed in such a way that residues between feeds are kept to a minimum. The absence of nourishment for pathogens prevents growth and allows hygienic feeding of the calves. In addition, it is now possible to automatically clean the full hose system up to four times a day.

## Automatic teat cleaning with fresh water

After a calf in the station has had contact with the teat, fresh water is sprayed over the teat. The spraying time can be set manually, as well as the nozzles used for teat cleaning. In combination with a highly dirt-repellent teat, this contributes to cleanliness and the reduction of cross-contamination between the calves.

## Automatic suction hose cleaning

Automatic cleaning of the inside of the system comes in addition to the teat cleaning. In this way, optimal hygiene is guaranteed.

The internal cleaning process always starts with pre-rinsing with fresh water. After that, the full internal system and all milk-carrying elements are thoroughly cleaned with a detergent. Depending on the model and version used, one or two detergents (alkaline and/or acidic) are used for optimal cleaning. The cleaning process ends with a second rinse with fresh water.

Depending on your requirements, the suction hose cleaning can be switched on up to four times a day.

This fully automated and thorough cleaning process prevents milk residues. Their absence stops microorganisms from developing, ensuring safe and successful feeding. This leads to optimal hygiene, safeguarding the milk quality and the calf's health.

## Auto-training function

The HygieneBox is also equipped with an auto-training function to help calves become familiar with the feeding station more quickly. When a calf comes to drink and gets close to the teat, a small portion of milk is conveyed through it. This way, the calf understands that it can drink. It supports her natural drinking behavior and encourages feed intake.

At the same time, the auto-training function saves time, since manual training is no longer necessary.

## YelloTeat

The teat on the drinking box is manufactured from a hygienic material that is highly dirt repellent. This is an extra way in which we achieve excellent hygiene while keeping cross-contamination to an absolute minimum.

## Drinking behavior at a glance

The Lely Calm is equipped with a smart management system: the prime source of information for your calves' health. It delivers clear insights into each calf with no extra work.

The data stored in the management software can be accessed using practical tools: CalfApp and CalfCloud. Both are ideal complements to the calf feeding system and are free to use.

### CalfCloud

Accessed via the Internet, CalfCloud gives you a clear overview of the drinking behavior of each individual calf.

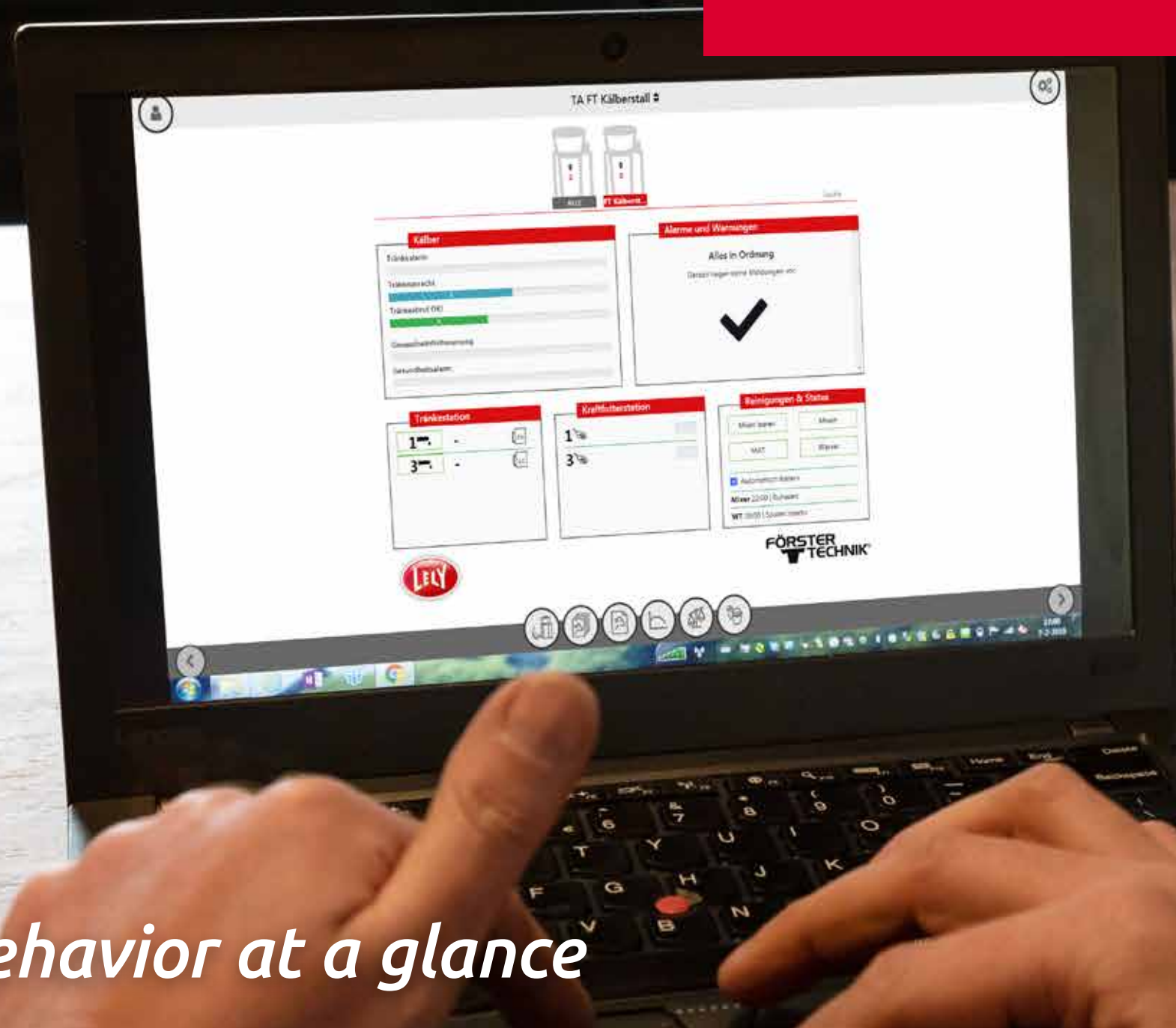
An extra feature is its integration with Lely Horizon, the management software for other Lely barn equipment such as the Lely Astronaut robotic milking system and the Lely Vector automatic feeding system. When you open Lely Horizon you also have the opportunity to access CalfCloud. All data on your full herd—including the calves—at a glance.

### CalfApp

CalfApp does exactly the same thing as CalfCloud. In addition to monitoring, you can also manage the Lely Calm through CalfApp alongside operating the system with the hand-held terminal.

### Extra eyes

With the management software, the Lely Calm offers you an extra set of eyes for intensively monitoring your calves. These extra eyes enable you to take direct action if any deviation in drinking behavior shows up.



## *Smart feeding works with the Lely Calm*

Calves can drink more when milk is available around the clock. A high milk consumption enables calves to grow up better and increases their production in the first lactation. Save time and provide freshly made portions of milk at the right moment with the help of automatic feeding.

*Start smart feeding with your local Lely Center*

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