



The CalfExpert

Revolutionise your
calf feeding



**ROBOTIC
FEEDERS**
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Reduce manual labour and grow better herd replacements.

The Calf Expert, made by Holm & Laue, is sturdy, easy to operate, and produces healthy, strong calves thanks to the individual mixing and hygienic preparation of the milk diet. The CalfExpert is intelligent, fast, and has many functions to make your work easier and guarantee the optimum feeding of your calves.

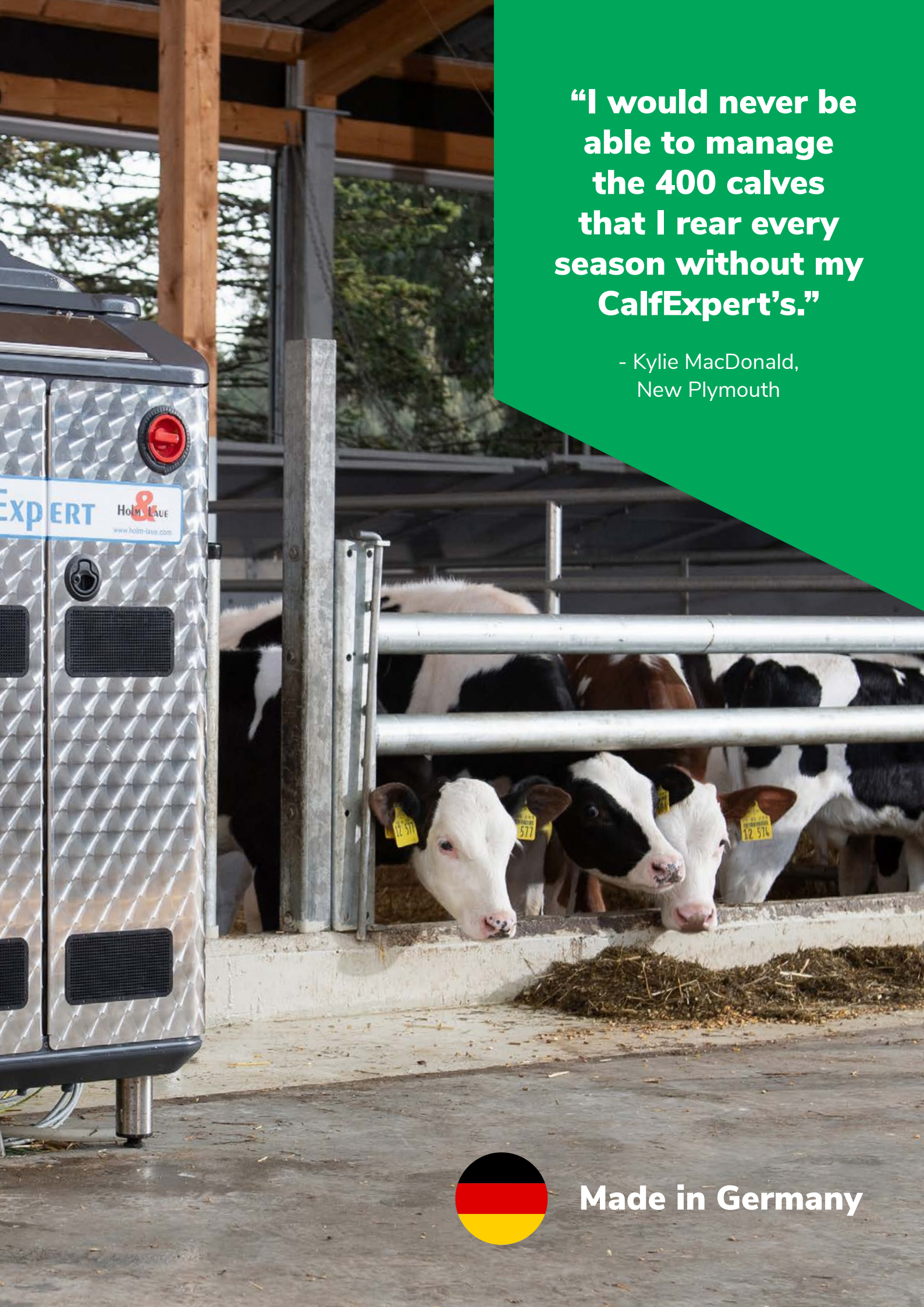
The CalfExpert will revolutionise your calf feeding. Important information is always at your fingertips; whether at the unit itself, HygieneStation, or on your mobile phone or tablet. Through advances in technology, the milk diet is prepared quicker than in previous systems and the cleaning is faster. The CalfExpert provides the opportunity to feed whole milk, growth-enhancement powders, calf milker replacers (CMR), or a combination of all of the above. Small doses of other liquid or powder additives can also be added if required.

The new SmartKeys and 18cm display provide the ideal operating platform for farm conditions.



**“I would never be
able to manage
the 400 calves
that I rear every
season without my
CalfExpert’s.”**

- Kylie MacDonald,
New Plymouth



Made in Germany



Customise every feed to the needs of each calf.

In a manual feeding scenario, it can be very difficult to adapt each individual feed to the needs of each calf. The CalfExpert makes this easy, customising the feed of every individual calf based on its unique weight and age.



Always freshly mixed

The milk feed for each calf is freshly mixed by the CalfExpert meaning that any residual milk is kept warm and flushed out after a certain period of time to ensure the best hygiene standards are maintained.

Alternative calf feeders tend to use a bulk milk system, but when warm milk is stored it goes off quicker. Did you know that at 40 degrees Celsius, the germ count doubles every 20 minutes?



Individual adaptation

Standard calf feeders are designed around a central milk pool system when it comes to modern feeding programs. The CalfExpert prepares each individual animal feeding program effortlessly ensuring that all calves at different ages and stages of rearing have the right concentrations at the right time.



“QuickChange” Logic for better performance

The mixing process and calf changeover for the new CalfExpert is designed at a faster pace to ensure that the milk is available at the HygieneStation after only three seconds. The tried and tested Flexitime program guarantees that calves' feeding times are spread throughout the day. This ensures there is no congestion around the stalls, reducing the waiting times for machines that service a high number of stock keeping every calf happy and healthy.



QuadroFlex: The flexibility to feed four calves at once

Feeding four calves simultaneously increases the feeding capacity of the CalfExpert by 20-30% with the new QuadroFlex system. Feeding quantities are measured for each calf by maintenance-free sensors with precedence given when two calves with different feed requirements attempt to drink from a PowerMixer, if the sister stall is switched off.



Milk reduction process

The CalfExpert is highly programmable to ensure calves have a gentle transition from a milk diet to forage feed. When it is time to start weaning calves off the milk portion of their diet, the CalfExpert can reduce the allocated quantity in small steps of 200mL per day, stimulating the development of the forestomach system.



Enjoy calm and compliant calves

Calves can come and go during the day with the CalfExpert. There are no restricted feeding times which means the calves will no longer see you as the feed provider introducing a sense of calmness next time you enter the calf shed. Younger or weaker calves have sufficient time to drink their full ration without competition and working with an intelligent credit logic, the CalfExpert allocates drinking credit for calves at different times to ensure there is no crowding. The HygieneStation is also fully equipped with anti-pirate valves to ensure that stronger calves don't steal more milk than required, providing an overall uniformed and relaxed group of calves.

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Flexible feeding programs suited to every calf.

All modern feeding programs should have the ability to adapt to the age, breed, weaning target and health of every individual calf. With the CalfExpert, these programs can be implemented to perfection.



Eight feeding curves for maximum flexibility

Implementing eight different feeding programs is easy with the CalfExpert. Within these programs there is greater flexibility to design your feed curves and pre-set feeding programs with each one allowing up to 16 turning points making sure you can implement your feeding concept down to the finer details.



EvenMilk: Intelligent whole milk feeding

Whole milk allows calves to digest and have fewer health issues when compared to calves fed on powdered milk. With the CalfExpert Whole Milk Program, you can set different whole milk proportions with CMR.

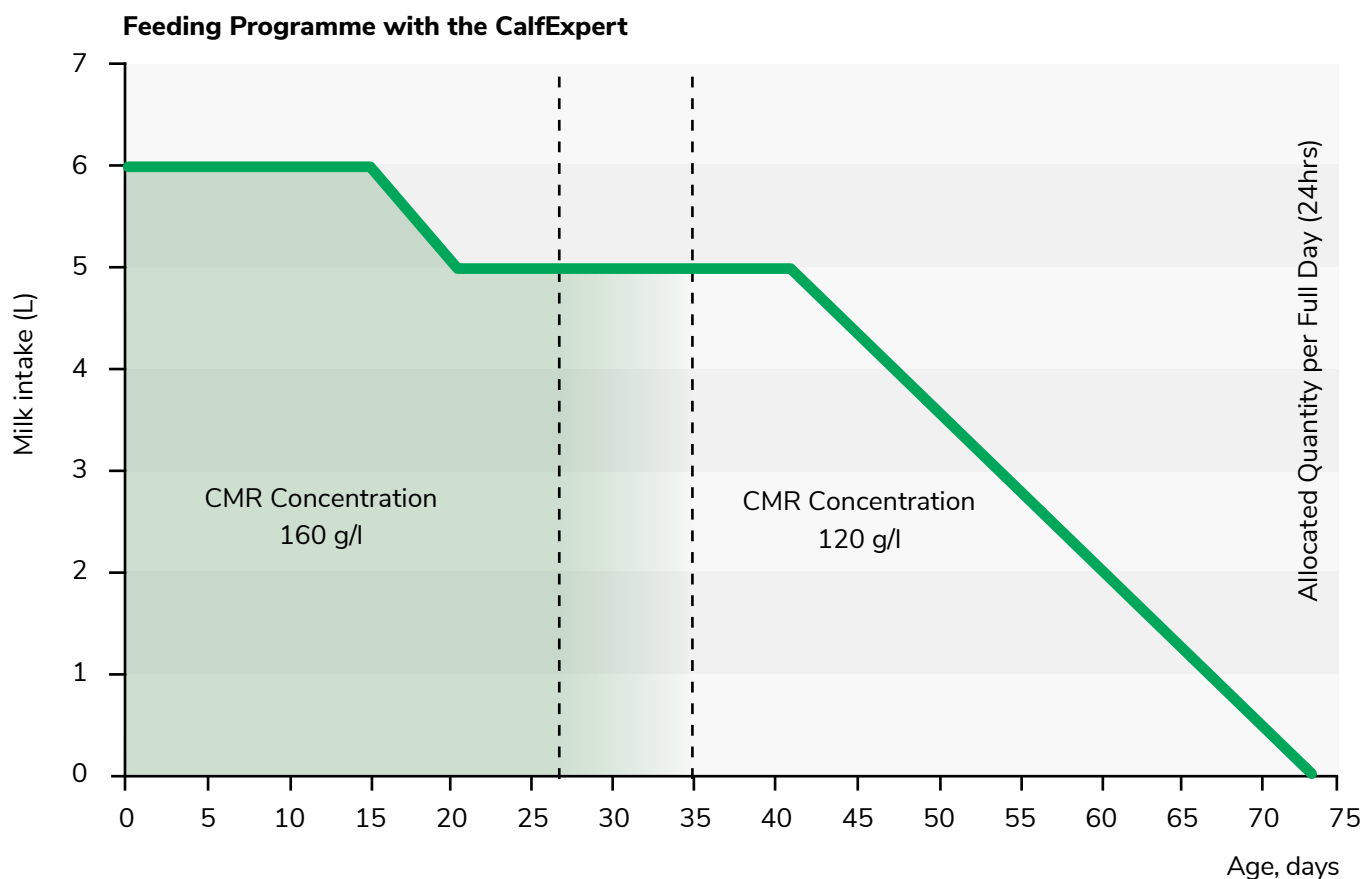
An abrupt changeover of milk types can cause stress on your calves which can then lead to digestion issues. EvenMilk intelligent whole milk control takes all the guesswork out by knowing how much whole milk is available and how much needs to be fed ensuring whole milk and CMR are mixed in balanced proportions throughout the day.





Effective mixing of milk replacer powder

Flexible feeding means that a wide range of milk additives or powders can be prepared lump-free. To avoid splashes, the CalfExpert PowerMixers begin mixing slowly, before moving to more intense stirring. This efficient process provides milk directly at the teat in only three seconds.



What if some of my calves are slow feeders?

To prevent the separation of the powder, the PowerMixer will slowly continue to stir the ration. When the weather is colder, the heater in the PowerMixer always ensures the mix is kept at a constant temperature.



Specific additive feeding

With the CalfExpert, adding small doses of additives with each freshly mixed feed has never been easier. Medicines and electrolytes can be added with ease to the feed of sick calves or during a specific dietetic program. The CalfExpert has one liquid additive doser, with the option to add a second, and up to two powder additive dosers giving you the ability to implement different feeding curves for different additives.



Metabolic programming

Global research has shown that calves who grow well in the first few weeks of their life typically produce a significantly higher milk production in the first two lactations.

Working smarter not harder

The CalfExpert makes your job easier with continual performance over 24 hours.



Total tube clean

Older models of the tube systems were a struggle to clean often and thoroughly which caused a contamination of milk deposits to accumulate in the lines.

During longer drinking breaks, the CalfExpert's HygieneStation rinses the entire milk line from the base unit through to the teat. In addition, the complete milk system is cleaned several times every day. This effective and consistent cleaning reduces calves exposure to bacteria and reduces the time and effort required for manual cleaning method.



Simple maintenance

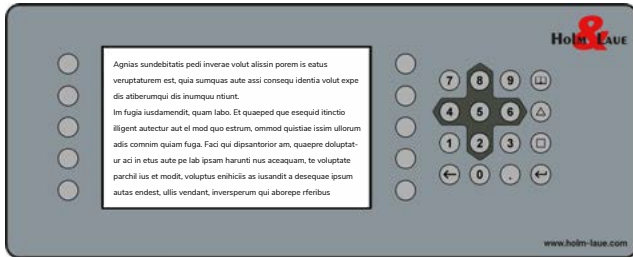
Regular testing of the technology within the CalfExpert is easy. You can test all the components quickly and easily within the maintenance menu ensuring you know exactly what to do and when to carry out calibrations.

The CalfExpert tells you exactly what to do to carry out calibrations. We recommend that you have your CalfExpert serviced by a qualified technician at least once a year. This will provide you with the peace of mind that your CalfExpert is ready to go for the upcoming calving season.



Integrated operating instructions

The 18cm display has an added benefit on top of providing the important calf data; a smart key which provides you with operating instructions. By pushing this key, the CalfExpert will display the operating instructions relevant to the current page you have on the screen.



Ready to work whatever the weather

Many areas of New Zealand are prone to freezing temperatures or frosts. The CalfExpert is equipped with an anti-freeze program which activates automatically when there is a risk of a frost.

Sensors at the CalfExpert mixing chamber and at every HygieneStation measure the ambient temperature and will adapt the mixing temperature and intensity of the anti-freeze program accordingly.



Fly shield as standard

Two large stainless steel doors protect the compartment where the PowerMixers are installed.

This keeps flies away from the milk and avoids problems with the milk system. The doors can also be locked to keep children out.

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Two cleaning agents

To further optimise cleaning the CalfExpert offers the use of both alkaline and acid cleaning agents. The cleaning agents may be used alternatively for each cleaning cycle or combined in one cleaning process such as alkaline > rinse > acid > rinse.

The cleaning agent pumps are positioned on the outside rear of the machine giving the possibility to draw directly from the containers, making it both safe and convenient as well as generating automatic messages the containers are near empty.



The best of both worlds.

Kill two birds with one stone; the CalfExpert relieves you of tiresome and hard jobs while increasing the feed quality provided to your calves.



CalfExpert software

The completely new software offers maximum clarity and simple operation of the CalfExpert. All calf data including individual feeding curves, alarm lists, and technical parameters can be opened on the 18cm display. Wi-Fi connectivity means you can access individual calf data on mobile devices including push messages when there has been a fault with the machine.



Gain time and flexibility

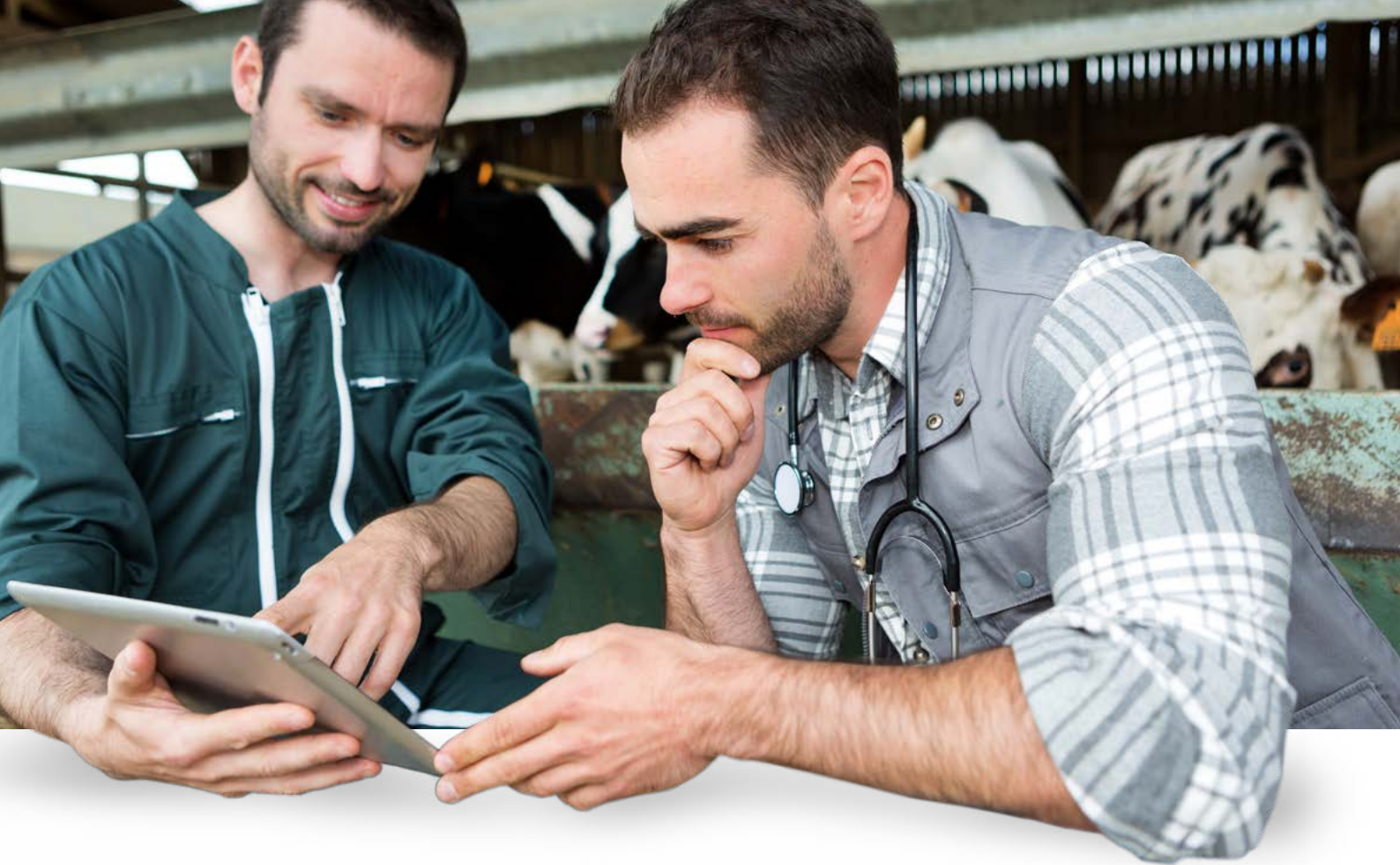
There are more important jobs and responsibilities to be taken care of in the mornings and evenings so let the CalfExpert feed your calves for you. All you need to do is manage the machine at a time that suits you.



A feeder that has growing potential

With four HygieneStations your CalfExpert is capable of feeding up to 150 calves (under certain conditions). If your current requirement is lower, say two HygieneStations, the intelligent modular design of the CalfExpert system allows for future upgrades at any time, with all options being available. This means you only need to purchase what you require now, knowing that if circumstances change, you can upgrade and make use of all possibilities at a later stage.





Going hand in hand.

When used with an additional hopper, the CalfExpert provides the perfect system for rearing your calves on a Queen of Calves program. The flexibility of feeding programs means you can use both Starter and Finisher powders simultaneously with the whole milk system. The Queen of Calves program and CalfExpert are both industry leaders and when used together give your calves the very best opportunity to achieve optimum health and reach liveweight targets.



CalfGuide app

CalfExpert comes with a Wi-Fi interface as standard. The CalfGuide app allows you to access important information directly on your mobile phone. This includes the general calf feeder data and details of the calf lists with the entire calf history. You can easily modify calf information and feeding curves in the app. A particularly practical feature is a health check, which allows you to objectively assess the health of your calves.



Automated work routines

With the CalfExpert, machine inspections, teat changes, and light cleaning can be included in work routines for farm staff at regular times. The CalfExpert will generate empty messages for CMR's, whole milk, and the cleaning agents. To ensure there is no panic, the CalfExpert does not wait until each of these is empty; it reminds you of the low levels a few hours in advance.



SmartKeys

The CalfExpert can be operated reliably in frosty conditions or rain, through gloves, or with dirty fingers. The illuminated SmartKeys will guide you through the program, only highlighting the keys applicable to the current display screen you are on.

New hygiene standards

So far, we have learnt that the CalfExpert always mixes feeds fresh and at the right temperature, based off the individual calf's needs. We also know that the CalfExpert cleans all tubes automatically as well.

However, with many conventional calf feeders, the place where calves drink is woefully neglected. The teat can be the source of transmission of many illnesses between calves. Holm & Laue have created a product called the HygieneStation to combat this. The HygieneStation cleans the teat after every calf drinks. The water from this clean also flushes out the saliva bowl after every use. This reduces bacterial contamination by up to 80%.



Ideal calf health



Always have a clean teat

With the new HygieneStation, the teat is cleaned after every visit with adequate pressure of fresh water spray. This routine cleaning reduces the germ contamination on the teat by 80%.



Natural drinking approach

The teat at the HygieneStation is positioned so that it slants downwards in a similar way to the teats on a cow. This encourages the natural drinking position of the calf. When the head is stretched, the natural reflex of the oesophageal groove is encouraged therefore reducing the risk of milk bypassing into the rumen.



Cleaned saliva tray

Every calf produces saliva while drinking. With the new HygieneStation, this saliva is collected in the mucus bowl and washed away with the teat cleaning water after every feeding process. This means the floor area within the HygieneStation remains clean and dry.



LED teat lighting

Experience has taught us that calves orientate better within the HygieneStation when the teat is illuminated. As a result, milk consumption at night is increased and the feeding processes are distributed more evenly over a 24-hour period.

**With the new
HygieneStation,
the teat is cleaned
after every visit
with a high
pressure water
spray.**

Reduce your workload

The CalfExpert can significantly reduce the amount of manual labour required when feeding calves.



Calves teach themselves

As soon as a calf lifts the teat, a small amount of milk flows into its mouth stimulating the calf's initial drinking impulse. Manual teaching of calves within the HygieneStation is limited to exceptional cases. Should manual training still be required, milk can be pumped to the teat by pressing the key on top of the HygieneStation



Can be tilted to clean

Many HygieneStations are installed directly into the calf pens. The HygieneStation can be tilted forward at a 90° angle so that manure can be removed and the whole area can be easily cleaned with the use of a hose.



Quick-release teat fastener

The teat can be changed quickly thanks to a quick-release fastener.

Easy weighing

All farmers want their calves to gain weight, but the task of weighing can often be strenuous. A weight scale at the HygieneStation collects the important information every time a calf visits the stall.



Individual weaning

The CalfExpert records the daily growth of calves using the Forefoot WeighScale. The information is clearly presented in graphs on the 18cm display. Tracking individual weight development provides the opportunity to wean your calves by weight. The CalfExpert can be programmed to automatically begin the weaning process based on their individual weight. This supports the development into a ruminant and saves you unnecessary calf rearing cost.



Making selection easy

When it's time for weaning, decisions need to be made about which replacements to carry through to the herd. The CalfExpert will provide you with valuable information of each individual calf. The information presented on the CalfExpert will support the overall improvement of your future herd by highlighting the calves that have developed poorly or experienced poor growth periods.



Better control

Not only will the WeighScales provide you with the daily weight gain of your calves, it will also inform you when your calves weight has declined.

The information is used on separate alarm lists and can help identify sick calves at an early stage. This provides the opportunity to treat calves before their illness reaches a serious stage.



**The CalfExpert
can be
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begin the weaning
process based on
a calf's individual
weight or age.**

Keep on track

Checking out feeding information for specific calves is now possible from the pen thanks to the HygieneStation display.



HygieneStation display

Mounted on one of the HygieneStations, or even a wall, the HygieneStation display provides relevant information about the calf in the calf group. The display shows the calf number in very large digits as well as the remaining quantity of their allocated feed and their alarm status. At the push of a button, this display can show you the calves with credit or calves on the alarm list sequentially. This means you will no longer have to constantly move between the calf pen and the CalfExpert display.



Credit and alarm status

You can conveniently read the remaining allocated feed quantity and estimate how much longer the current visit is going to take. The alarm status is easy to recognise on the basis of a scale.



Would you like some more?

At the HygieneStation display you have the opportunity to request an extra mix for a calf and either feed this to the calf or pump it into a bucket.



Options and Features

Base unit

- Two PowerMixers with SoftStart logic and heaters.
- Milk freshly prepared on an individual basis for each animal.
- CalfExpert feeding software with integrated operating instructions and help functions.
- 7" display with SmartKeys.
- Eight feeding curves pre-set (incl. metabolic feeding curve), with adaptation possibilities for individual animals.
- Rinsing of mixing tank and suction line.
- Two detergent pumps for the automatic cleaning of all milk-carrying components with automatic empty message.
- Wash temperature up to 65°C.
- Easy-to-clean surfaces made of stainless steel or plastic.
- Whole milk system for variable dispensing of whole milk percentages from 35 - 100%, equipped with an effective heat exchanger spiral and automatic cleaning as standard.
- Powder store for 50kg CMR with only 112cm filling height.
- Powerful powder-conveying auger suitable for various CMRs.
- Early empty warning for milk replacer powder.
- Automatic registration of new calves.
- Flextime feeding capabilities, to avoid stressful regular feeding hours.
- QuickChange logic for faster credit changeover between the calves.
- Can feed up to 150 calves (with four HygieneStations).
- Anti-freeze program that is activated automatically.
- Fly shield
- Wi-Fi as standard in the calf feeder.
- Liquid doser for liquid feed additives and medicines.
- Important information can be received on mobile devices.
- Push messages for warnings (e.g. CMR empty soon).

Additional options

HygieneStation

- Up to four feeding stalls per CalfExpert.
- Pump as an automatic and manual training tool for calves, as it delivers milk diet to the teat.
- Anti-pirate valve to prevent stealing of milk.
- Distance of up to 7m between feeder and stall possible.
- Animal recognition via H&L collars or ISO-compliant ear tag identification (half-and full-duplex mode).
- Can be tilted away for mucking out.
- LED teat lighting.
- Saliva bowl.
- Teat is rinsed by water following every visit.

HygieneStation display

- Display of animal number and alarm status.
- Indication of alarm and credit calves.
- Release of an extra mix.

Animal weighing scales

- Forefoot WeighScale in the feeder stall for individual calf management and individualised weaning function

CalfGuide

- Management software with own server.
- Bidirectional control of the CalfExpert.
- Locally functioning variant (without internet)
- Integrated Cloud connection.

Powder additive doser

- Up to two dosers for powdered additives and medicines, with dietetic program to prevent diarrhoea.

Liquid additive doser

- One further liquid doser for liquid additives and medicines.

Hopper extension

- Stacking frame for another 25kg CMR (filling height 138 cm).

Additional powder hopper

- Additional stand-alone powder hopper capable of holding up to 50kg of powder.

Alarm lights

- Indicate operating status of machine from outside calf shed.

Technical Specifications

Technical specifications - CalfExpert*

Power supply and heating performance	400V 16A (6kW)
Capacity with four feeder stalls	Up to 150 calves (under certain conditions)
Identification system	Multireader HDX and FDX
Storage tank for milk replacer powder	90L/ 50kg
Powder filling height	1.12m
Heater Capacity	12L
Dimensions of CalfExpert (w x d x h)	0.6 X 0.7 X 1.21 m
Space requirement for CalfExpert	1 X 1m

*Technical specifications subject to change

Technical specifications - HygieneStation

Power supply (VDC)	24V
Water inlet	1/2"
Optional teat and grid rinsing permissible water pressure	1.4- 8.2 bar
Weight of fully equipped HygieneStation	approx. 50kg
Permanent sound pressure level	< 70 dB
Dimensions of HygieneStation (w x d x h)	0.47 X 1.31 X 1.08m
Space requirement for HygieneStation	0.50 X 2.3m

*Technical specifications subject to change



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