

# FUTURE PROOF YOUR DAIRY

WITH PREMIUM HEALTH MANAGEMENT.

# PROCE. GRANGEL GRAN

#### Unique precision: ± 0.018°F ACCURACY

The most accurate data from the inside for your operational success.

#### More cow knowledge THAN EVER BEFORE!

In-depth insights into health, fertility and feeding.

#### Top Advice for YOUR BUSINESS

Get the best out of your dairy with the support of the smaXtec team.



# INSIDE MONITORING with smaXtec

To be a reliable system you need accurate data. The smaXtec system is a world leader in this respect because we collect the data directly from the source; from inside the cow.



#### robust and continuous.

Any case of illness inevitably results in time expenditure, treatment costs and ultimately milk loss.

With smaXtec you can catch diseases as they develop – before milk production suffers. Only precise measurement from the reticulum offers true early detection!



UNIQUE DATA: Inner body temperature



UNIQUE DATA:

Drinking cycles

and amount of water



UNIQUE DATA:

Rumination via reticulum contractions and rumen activity



UNIQUE DATA:

pH value (optional)



Activity

#### The most important factor:

#### INNER BODY TEMPERATURE!

By measuring the inner body temperature, you can detect illnesses before rumination is affected or physical symptoms appear. Only smaXtec can do this!

The most common diseases in dairy cows are characterized by minimal changes in body temperature at their very onset.

This applies both to high-risk and cost-intensive inflammatory diseases such as mastitis or metritis and to metabolic disorders like milk fever or ketosis, which often remain undetected for a long time and have serious consequences.

This means that if you want to monitor your cow's health in the best way possible and combat illness before it breaks out, you need to measure inner body temperature. And this is only possible with smaXtec!



#### Without inner body temperature:



#### **DID YOU KNOW...**

... that several short fever episodes, which can be observed even before initial external symptoms appear are typical for mastitis?

Read more about it here >>



### MONITOR REPRODUCTION

#### in the best possible way

In addition to unique health information, smaXtec also provides the best heat detection, abortion alerts and early calving alarms & supports the important transition phase.

#### Transition Phase & Calving

The period around calving is of crucial importance for the health and productivity of your dairy cows. Careful monitoring and appropriate feeding are essential to ensure everything runs smoothly in this phase. smaXtec offers a unique system for monitoring the needs of cows during the transition phase.

- Early and accurate notification ~ 15 h before calving
- Sufficient lead time for calving preparation or early treatment enables support (if necessary), e.g. in the case of difficult or twin births
- Improved time management
- Comprehensive monitoring of health in the critical phase around calving
- Precise heat detection incl. recommended insemination time
- Better fertility KPIs, e.g. calving intervals and insemination index.
- Rapid identification of **fertility problems**.
- Optimization of sync programs for reduced hormone use.
- Early abortion detection.



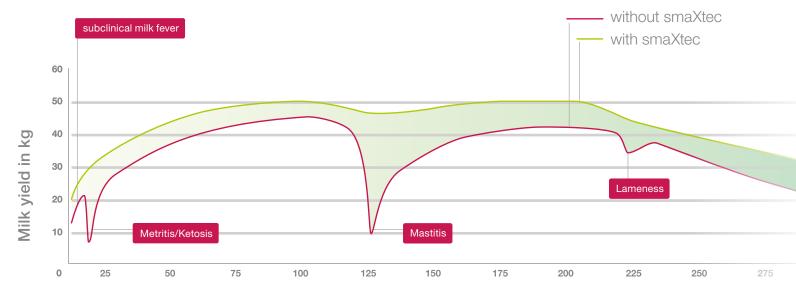




Optimize BOTH health AND reproduction smaXtec makes it possible.

### DISCOVER YOUR HIDDEN POTENTIAL!

Your dairy cows are at the heart of everything we do. We are convinced that you too have hidden potential on your farm - we want to help you to discover and utilize that potential!



#### Lactation days

With the support of our expert advisory team, smaXtec offers more than just cutting-edge technology; it provides a one-of-a-kind comprehensive farm optimization plan. With help from our team of experts, you can keep improving your operation, no matter where you are or what your goals might be.

#### Step 1: Harness Early Detection

Start by leveraging the power of early detection to improve animal health and increase milk yield. The lactation curve clearly shows how much early intervention and preventative measures can benefit your farm.

#### Step 2: Unlock Hidden Potential

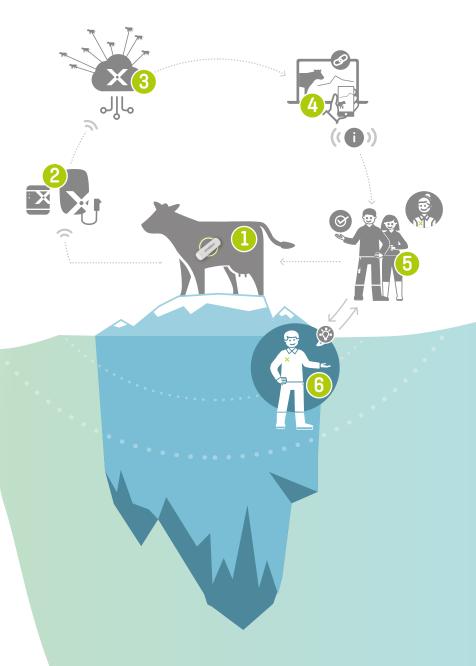
Then, combine our unique data, advanced Al analysis, and tailored, professional customer support to uncover hidden opportunities on your farm and enable continuous improvement and greater success.

Find out more in this video >>



BETTER HERD HEALTH  $\rightarrow$  HIGHER LONGEVITY  $\rightarrow$  MORE MILK.

### SEE HOW SMAXTEC WORKS!



Utilize your hidden potential. With smaXtec.

Proven health monitoring works best from the inside.

smaXtec boluses measure inner body temperature, drinking cycles and quantity, rumination via reticulum contractions, activity, and pH (optional) in the reticulum.

The **Base Station** automatically reads the **data** and transmits it to the **smaXtec cloud** via the integrated SIM card.

The Climate Sensor provides additional information on the outside temperature, humidity and atmospheric pressure on farm.

The data is analyzed in the smaXtec TruD™ cloud using artificial intelligence and tried-and-tested algorithms.

You can access clearly structured **task lists** via smartphone or PC and adjust the settings yourself to receive relevant notifications. Data is exchanged automatically by linking smaXtec with the **herd management software**.

The smaXtec Customer Success Team is on hand to provide you with the best advice at all times - by telephone and on site.

Take the right actions at the right time and increase your farm's success!

### Easy access to COW & HERD DATA



#### User-friendly smaXtec Messenger for the PC

- 24/7 health monitoring of the herd
- Insights into individual animals and group overviews
- Detailed overview of feeding and fertility status
- Access via web browser, no software installation required

#### smaXtec App for on the go

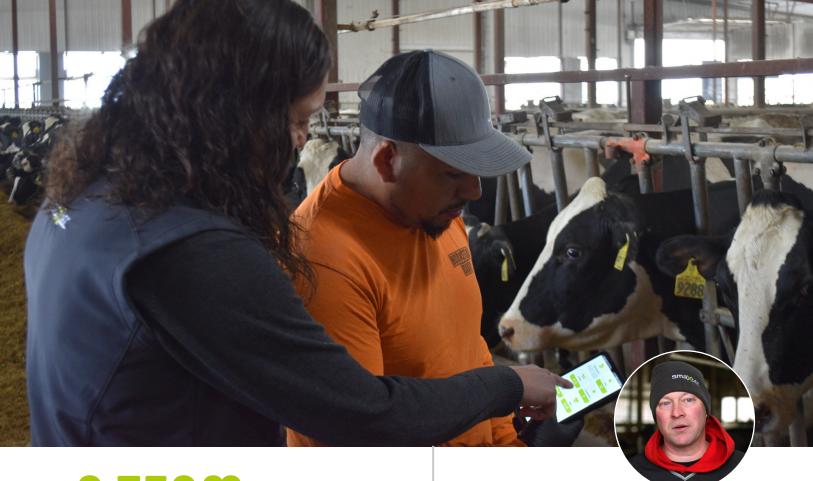
- Push notifications when action is required
- Clear task lists

#### Notes function

With the notes function, you have the option of saving additional, individual notes for each event for each animal. All employees on the farm can also access these comments at any time using any device. This means you always have all relevant information on illnesses, treatments and events available and can organize your day-to-day work even more efficiently.

#### **Notifications**

Immediate notifications allow you to promptly take any necessary action – even before rumination decreases and production levels are affected.



#### A TEAM FOR YOUR SUCCESS!

Simplify the management of your dairy farm - with the support of THE experts in early detection: smaXtec.

#### smaXtec support & advice means:

- Our team of experts will provide you with comprehensive, long-term advice on cow health and management.
- We support you in integrating smaXtec into your operational processes, improving work processes and optimizing procedures.
- As a smaXtec customer, you receive exclusive access to regular training courses and webinars with numerous practical tips for your business success.
- In the digital smaXtec Academy, you have exclusive access to courses specially designed for our customers on topics such as mastitis.
- With exclusive farm days and events we promote knowledge sharing among smaXtec users.

smaXtec customer Adam Hurtgen

"smaXtec support makes all the difference and sets it apart from other systems."

Hurtgenlea Holsteins, 215 cows, USA

Together, we are making the dairy industry more sustainable and profitable!





## TruDrinking<sup>TM</sup> Water management under control at all times

No milk without water! Monitor drinking behavior including drinking frequency and quantity with smaXtec.

If cows do not drink enough water, their feed intake and therefore the **amount of milk** they produce decreases. It's only with smaXtec that you can check whether the required amount of water is actually being consumed!

Read more about TruDrinking

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# Optimizing rations WITH THE FEEDING TOOL

Recognize all types of changes or problems relating to feeding. With rumination data from where rumination happens – the cow's stomach.

The smaXtec feeding tool lets you see at a glance how the rumination activity of your different feed groups has developed recently, and you will notice immediately if there are **deviations in rumination time**. Trends with possible fluctuations or daily changes can also be seen in the feeding tool.

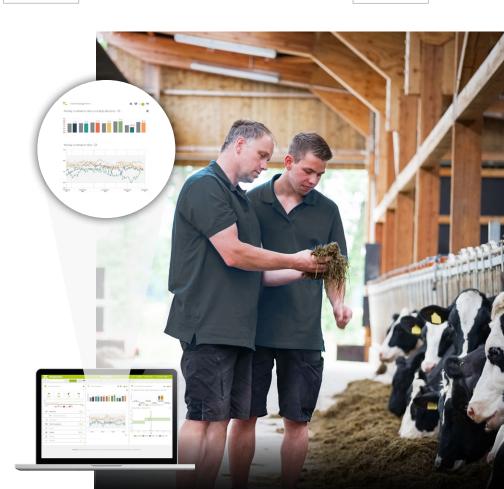
Read more about the Feeding Tool

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#### Your advantages:

- Objective analysis of your water supply
- Early indicator for lower milk yield: less water intake means less feed intake and therefore less milk
- Immediate detection of errors in the supply, e.g. contamination, stray voltage
- Drench the optimum amount of water
- Better performance through optimal supply







# TruAdvice<sup>TM</sup> Greater efficiency and improved processes - thanks to Al

smaXtec has combined the power of artificial intelligence and data from hundreds of thousands of animals to develop TruAdvice™ - another technological world first for our customers!

TruAdvice™ utilizes the **full potential** of the data and **warns** if a **specific disease** is **suspected**, including the probability of disease. The notification of suspected mastitis is the first TruAdvice™ function, with more to follow.

Read more about TruAdvice

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# Optimize feeding as best as possible: **pH VALUE**

With the unique, patented smaXtec technology, you can continuously monitor pH values and identify problems in feed management.

The pH value is the most suitable parameter for evaluating and optimizing feeding. Rumen pH value, according to scientific opinion, is the gold standard in the early detection of subacute ruminal acidosis, which can affect up to 25 % of high lactating and freshly lactating cows.

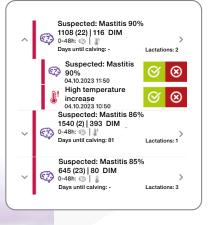
Read more about the pH Value

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#### Your advantages:

- Time savings through early indications of a specific suspected illness
- Rapid response favors quick recovery
- Assistance even for less experienced employees
- Can be optimally integrated into SOPs
- Increased efficiency and reduced workload



The more stable the pH value, the better the conditions for efficient rumen flora. With smaXtec, you can keep an eye on this data and create optimum conditions.

You benefit from:

- improved feeding efficiency
- higher productivity
- lower feed costs







#### THE HEALTH SYSTEM.

Increase herd health and profitability with smaXtec!



- Inner body temperature measurement (± 0.018 °F)
- Water intake per cow and drinking frequency
- Rumination measurement via contractions of the reticulum

#### REPRODUCTION

- Heat detection incl. optimal insemination window
- Abortion detection
- Calving prediction (~ 15 hours in advance)

#### ) FEED MANAGEMENT

- Group & Ration Level Rumination Insights
- pH measurement: individual, group, and herd level insights

#### smaXtec customer Amber Horn

"We recently analyzed our cull rates for our dairy, comparing our last year before investing in smaXtec in 2021 with this past year (2023). Our sold and died less than 90 days in milk dropped from 12.28% to 4.43%. With smaXtec, we are seeing a 7.8 ROI just from the improvements on cull rates."

Hornstead Dairy Farm, 2100 cows





#### **CONTACT US!**

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For more information





