

Nedap **CowControl™**

Know your COW

Control your herd
Improve your dairy

 **nedap**



The need for continuous improvement is in you. Improved production and profitability comes from decisions and actions based on insights.

Insights come from analyzing and understanding your herd's performance trends. Your herd's performance trends are shaped by the individual animals in it.

The first step to gain insights about your herd is making sure each cow is identified and connected to her own record. If you don't know your cow, how will you know her impact on your bottom line?

• Take control

Maximize herd performance and farm efficiency with Nedap CowControl.



• Know your cow

Let your SmartTags show you more than the expert eye can see. Day and night.

Our advanced SmartTags identify each cow and keep track of her signs of heat, position, eating, rumination, standing, lying, walking and inactive behavior 24/7. This provides the most precise and complete information about the fertility, health, well-being and nutritional status of individual cows and groups. Supplemented by their exact location in the barn.

• Control your herd

Let technology serve you instead of the other way around.

Nedap CowControl cleverly turns SmartTag data into real-time and relevant alerts, to-do lists, reports and barn maps to help manage and control your herd. These actionable insights are easy to understand and presented on PC, tablet and smartphone. Nedap CowControl also integrates with your farm automation systems and dairy management programs. As a result, you and your team automatically focus on the right cows, at the right time, with the right treatment.

• Improve your dairy

Make data-driven decisions to improve your bottom line.

With Nedap CowControl you can also improve farm management at the tactical and strategic levels, using behavior insights of your groups and entire herd. They show you how external factors and management decisions influence the herd's performance. A tool for you and advisors to evaluate the impact of (changed) feeding strategies, housing conditions and milking procedures. So you can make confident choices to continuously improve your bottom line.

24/7 cow management All-in-one

Nedap CowControl combines an unmatched range of monitoring features and management tools in a highly advanced, yet easy to use system.

Cow Locating

Locate cows needing attention or treatment quickly and easily. See and follow their real-time position on your barn map.

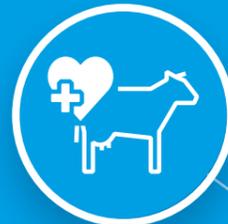


Herd Performance Trends

Chart the behavior patterns of your groups and entire herd. Get group alerts when possible risks affect a group's performance. Evaluate the impact of management decisions on herd performance to make improvements.

Health Monitoring

Individual health management for early detection of health issues and intensive monitoring of transition cows and post-treatment recovery.

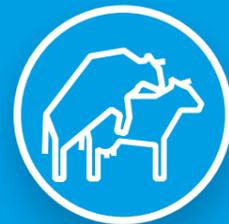


Integration & Connection

Easily connect Nedap CowControl to your farm automation systems and dairy management programs thanks to advanced integration applications.

Heat Detection

Highly accurate heat detection with advice for the optimal insemination moment, as well as reproduction insights.



Identification

Proven electronic ISO compliant cow identification in all your automated systems such as milking, feeding and sorting & routing equipment.



Flexibility in SmartTags and features

Choose the SmartTag Neck or Leg with the features fitting your dairy farm management style.



Real-time information on all devices for multiple users

All team members have access to real-time and relevant insights fitting everyone's needs. At any time and from anywhere with a PC, tablet or smartphone.



Increase profitability with Precision

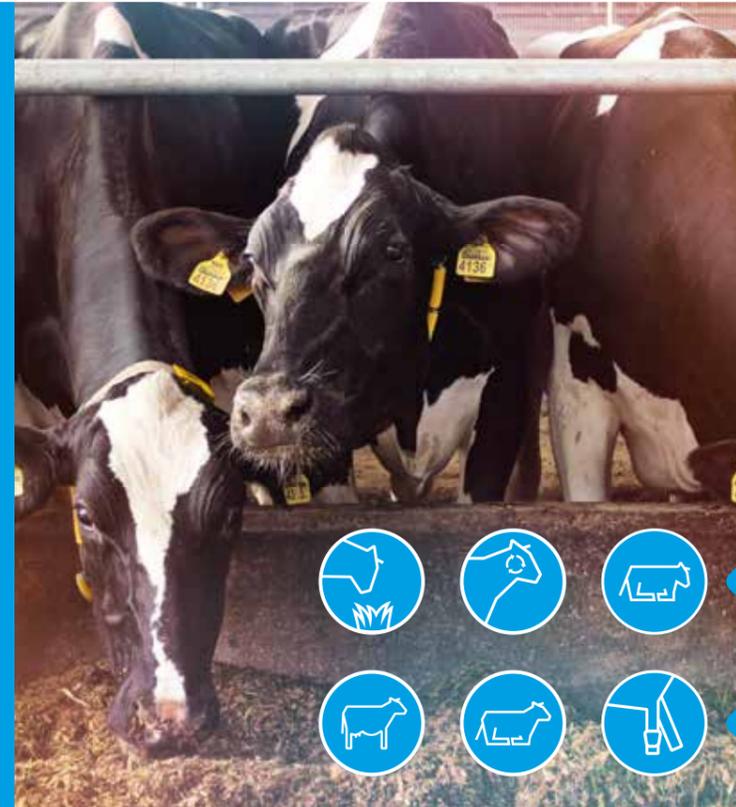
Put the power of precision farming on your side. Improve your bottom line with the solutions to maximize dairy herd performance and save time, labor and costs.



Heat Detection

*Improve reproduction results.
Increase labor efficiency.*

Nedap CowControl detects the heats of millions of cows with outstanding accuracy, helping dairy farmers worldwide improve reproduction results and labor efficiency. It automatically tracks signs of heat - such as increased activity, sniffing, chin resting and mounting behavior - of all your cows 24 hours a day. The system shows a clear list of all cows in heat with their optimal insemination moment for effective insemination with the highest chance of conception. It also provides additional reproduction insights, helping you to find cows with irregular heats, non-cycling cows and non-pregnant cows.



Health Monitoring

Keep cows healthy, fertile and productive.

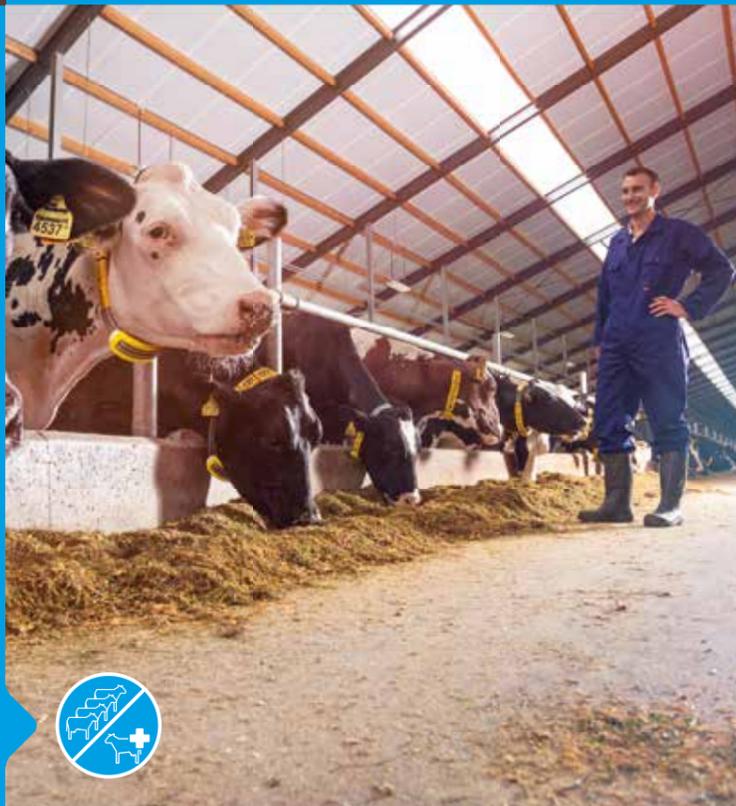
Nedap Health Monitoring is an essential tool to keep your cows healthy, fertile and productive. The SmartTag Neck and Leg both register a combination of three behavioral aspects, giving the most precise and complete insight into the health status of each cow. The system compares all behavior with standards for optimum condition, the previous behavior of the cow and the behavior of the group she is in and detects changes or abnormalities. It provides the earliest and most reliable health alerts for cows that need urgent attention and shows a list of cows that need to be checked today, allowing you to treat health issues before they become problems. It also enables you to intensively monitor transition cows and post-treatment recovery.



Herd Performance Trends

*Evaluate group and herd behavior.
Improve farm management.*

Nedap CowControl charts the behavior patterns of your groups and entire herd. They show you how external factors and management decisions influence the herd's performance. The system sends a group alert when it detects abnormalities among a percentage of the cows in a group, allowing you to respond to external factors posing a risk to their health, milk production and reproduction. At strategic level, group behavior reports and herd performance insights offer a valuable tool to measure and evaluate the impact of (changed) feeding strategies, housing conditions and milking procedures. So you have fact-based information to continuously optimize your management and improve your bottom line.



Cow Locating

Stop searching. Start finding.

Finding cows needing to be checked, inseminated, treated or fetched was never as easy and time-saving as it is with Nedap Cow Locating. The system automatically locates the cows you need to find. It accurately shows and follows the real-time position of individual or multiple cows on your barn map with one click on your PC, tablet or smartphone. Nedap Cow Locating is fully integrated with Heat Detection, Health Monitoring and Herd Performance Trends. As a result, responding to cows that need attention is easier and quicker than ever. This saves you and your team a lot of time and aggravation every day and at the same time ensures a better follow-up of alerts.



Where do you want to Improve?

Nedap CowControl supports you in getting the most out of your cows, your farm and your farm life. From the day it is installed long into the future. Where do you want to make improvements?



Improve reproduction results?

- ✓ Increase heat detection rates
- ✓ Increase submission rates (reduced missed heats)
- ✓ Increase conception rates (better timing of AI)
- ✓ Increase pregnancy rates
- ✓ Optimize calving intervals
- ✓ Find non-cycling and irregular cycling cows
- ✓ Detect non-pregnant cows earlier
- ✓ Add value to synchronization programs with automated cherry picking



Better cow health and condition?

- ✓ Detect health issues 2-3 days earlier
- ✓ Closely monitor individual cow behavior and health in the transition period
- ✓ Treat more effective
- ✓ Measure post-treatment recovery
- ✓ Improve fertility through better condition
- ✓ Reduce mortality rate



Improve farm management?

- ✓ Use actionable cow insights for targeted, pro-active and efficient daily management
- ✓ Use group and herd insights to chart the herd's patterns, evaluate performance and implement long-term management improvements
- ✓ Have a tool to let AI-technicians, veterinarians and nutritionists have access to your individual cow, group and herd behavior insights
- ✓ Management by exception: only focus on cows that need attention



Get a more productive and sustainable herd?

- ✓ Achieve more peak productive days per cow
- ✓ Achieve more milk per cow
- ✓ Prevent production loss
- ✓ Extend your cow's life span and number of lactations
- ✓ Reduce forced culling due to fertility and health problems
- ✓ Get cow performance insights to improve selection



Increase labor efficiency and effectiveness?

- ✓ Automatically identify cows, detect heats, monitor health and locate cows 24/7
- ✓ Integrate cow data with farm automation systems and dairy management programs to get more out of automation
- ✓ Focus your resources on the right cow, at the right time with the right treatment
- ✓ Let your team make confident decisions with fact-based herd information



Save costs?

- ✓ Save on labor
- ✓ Reduce fertility / insemination costs
- ✓ Minimize veterinary treatment and medication
- ✓ Reduce death loss
- ✓ Reduce costs of synchronization programs: save on labor and hormone use



Improve welfare and sustainable production?

- ✓ Give cows the individual attention they need
- ✓ Keep a close eye on the health, comfort and well-being of your cows
- ✓ Have a tool to increase production while using the same or less resources
- ✓ Minimize disruption of cow routines: reduce pregnancy checks, lock-up times, number of 'touches' per lactation and cow-employee interactions



More enjoyable work?

- ✓ Gain peace of mind with control over your herd 24/7
- ✓ Have real-time cow and herd insights available anytime, anywhere on any device
- ✓ Stop searching for cows - start finding them
- ✓ Save time for other tasks and activities

SmartTags

Choose the SmartTag Neck or Leg with the features that fit best to your preference and farm situation.



Proven

Measurements and algorithms are validated by universities and research institutes around the world under various circumstances.

Learn more at nedap.com/validations.

Smart and durable

- * Real-time and long range data transfer.
- * 24-hour in-tag data memory.
- * Passive ISO compliant identification technology. Independent of battery function, indefinite lifetime.
- * Robust materials and construction, engineered for farm environment. A single all-in-one device attached to the collar or leg: convenient for the cow, easy to attach, stays in place.
- * System alerts if SmartTag is incorrectly attached.
- * Expected service life of 8-10 years.

Neck

Basic (I)FE

- ✓ Identification (ISO)*
- ✓ Heat Detection
- ✓ Health Monitoring:
Eating behavior

Standard (I)FER

- ✓ Identification (ISO)*
- ✓ Heat Detection
- ✓ Health Monitoring:
Eating, Rumination and Inactive behavior
- ✓ Herd Performance Trends

Premium (I)FERP

- ✓ Identification (ISO)*
- ✓ Heat Detection
- ✓ Health Monitoring:
Eating, Rumination and Inactive behavior
- ✓ Herd Performance Trends
- ✓ Cow Locating

Leg

Standard

- ✓ Identification (ISO)*
- ✓ Heat Detection
- ✓ Health Monitoring:
Standing, Lying and Walking behavior
- ✓ Herd Performance Trends

System overview

Advanced Simplicity

Use proven and advanced technology that is easy to use, install, integrate and scale.

SmartTag
The SmartTag (Neck or Leg) records all behavior and the location (SmartTag Neck) of the individual cows real-time and 24-7. Accelerometer data is intelligently preprocessed and converted into cow behavior by the SmartTag.



Cow Locating Beacon
The beacons, which are only needed for Cow Locating, continuously send signals to the SmartTag Neck. The SmartTag sends the signals to the antenna. The processing unit calculates the exact position of each cow.

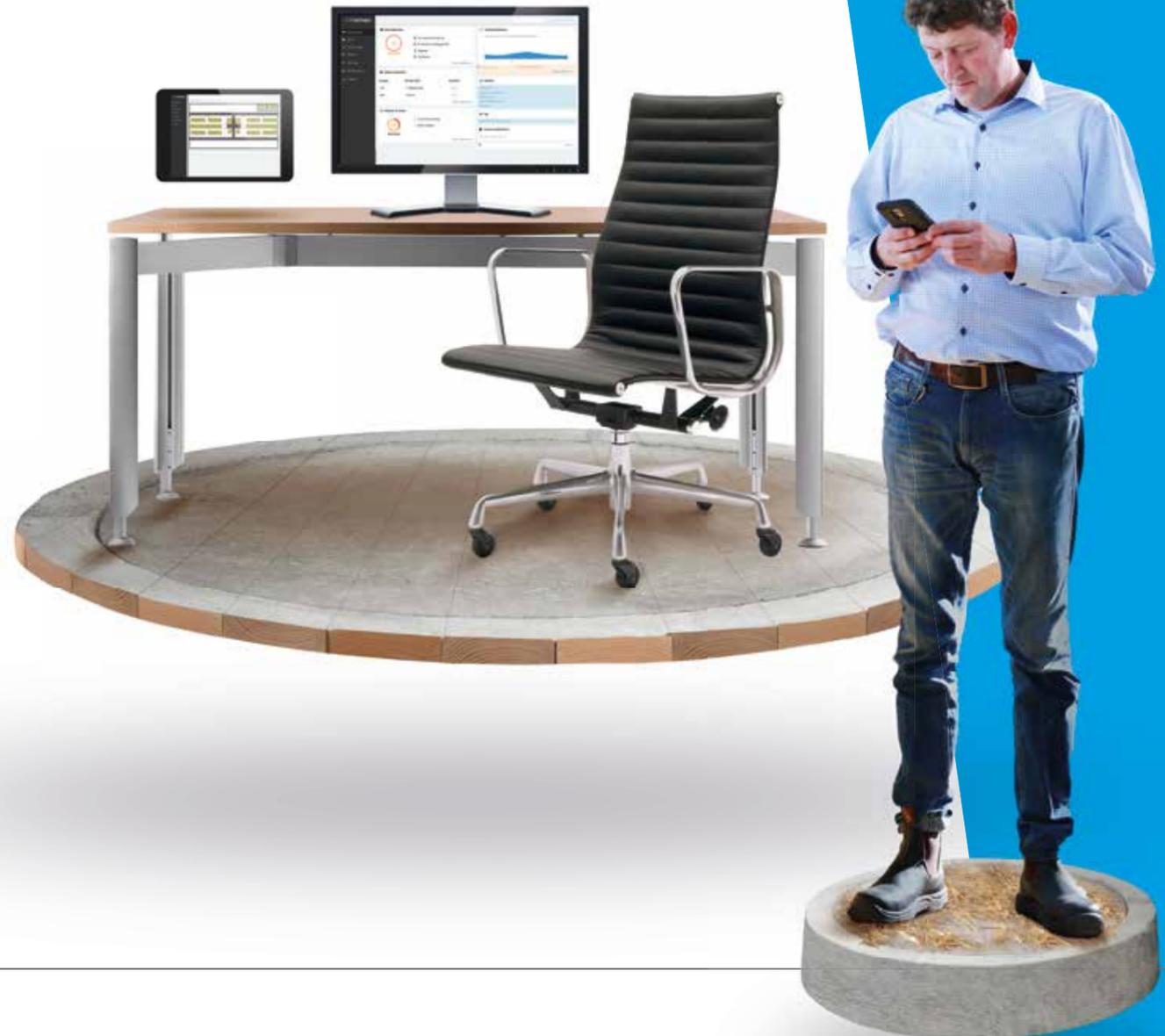


Antenna
The data from all the individual cows is continuously collected by the antenna. The antenna has a range of at least 75 meters around in the barn and 250 meters around when placed outside for grazing cows.



Processing unit
The processing unit processes the data received by the antenna, analyses the individual data for each cow and turns it into relevant and actionable insights that can be viewed on PC, tablet and smartphone.

Cloud
A continuously expanding range of services such as online backup, remote access, remote support, Business Insight, API connections and more are available through the cloud.



Fits your farm and grows with it

- * Highly flexible and designed to fit any farm type and size.
- * Simple to install and setup.
- * Easily scalable and flexible to expand with other automation solutions.
- * System operates locally on the farm and cloud-based, with or without internet connection. Essential processes are not internet dependent and always continue.
- * Web-based user interface only using a browser. No need to install software or applications. Remotely updatable.



Actionable herd insights Real-time

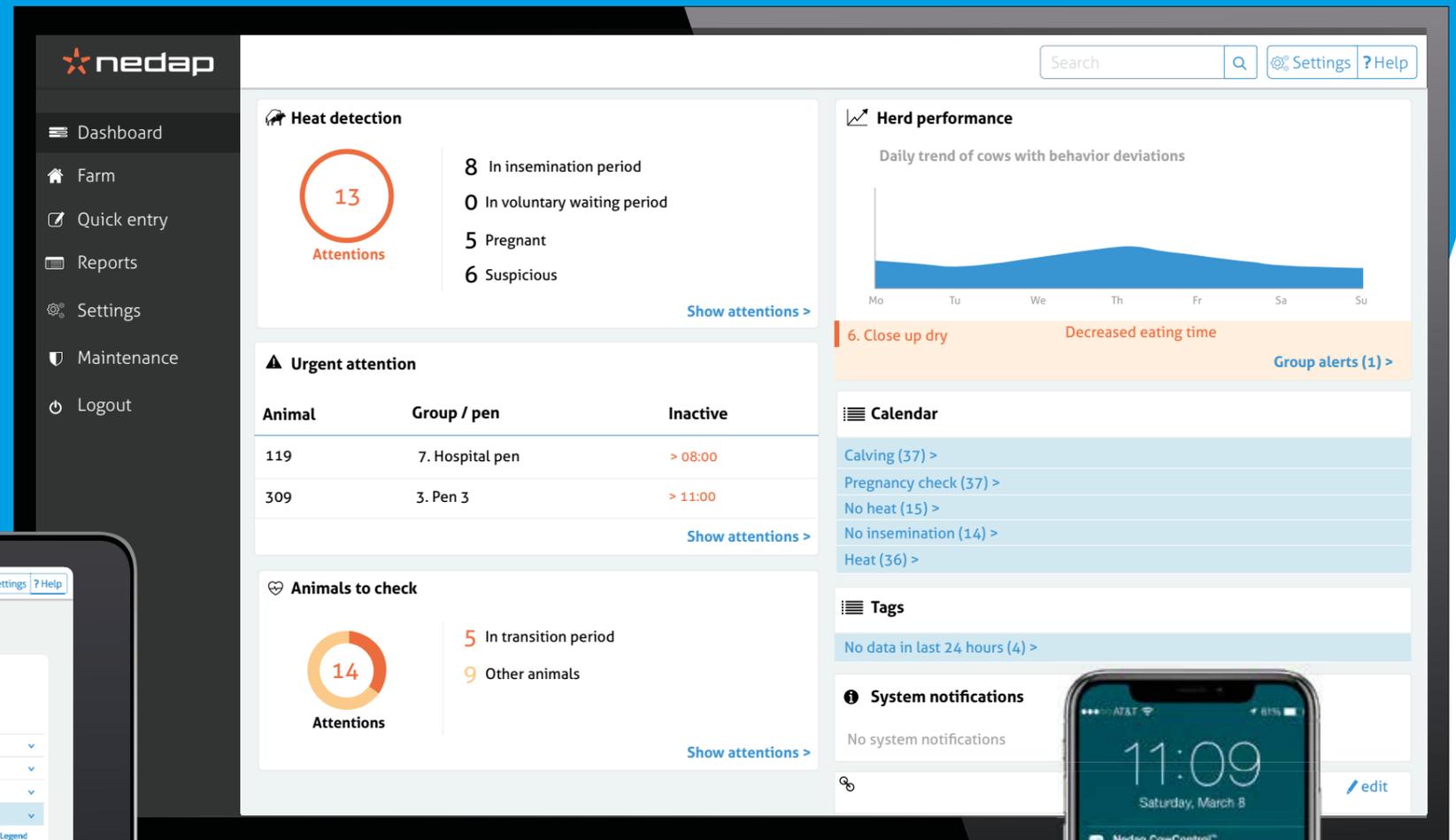
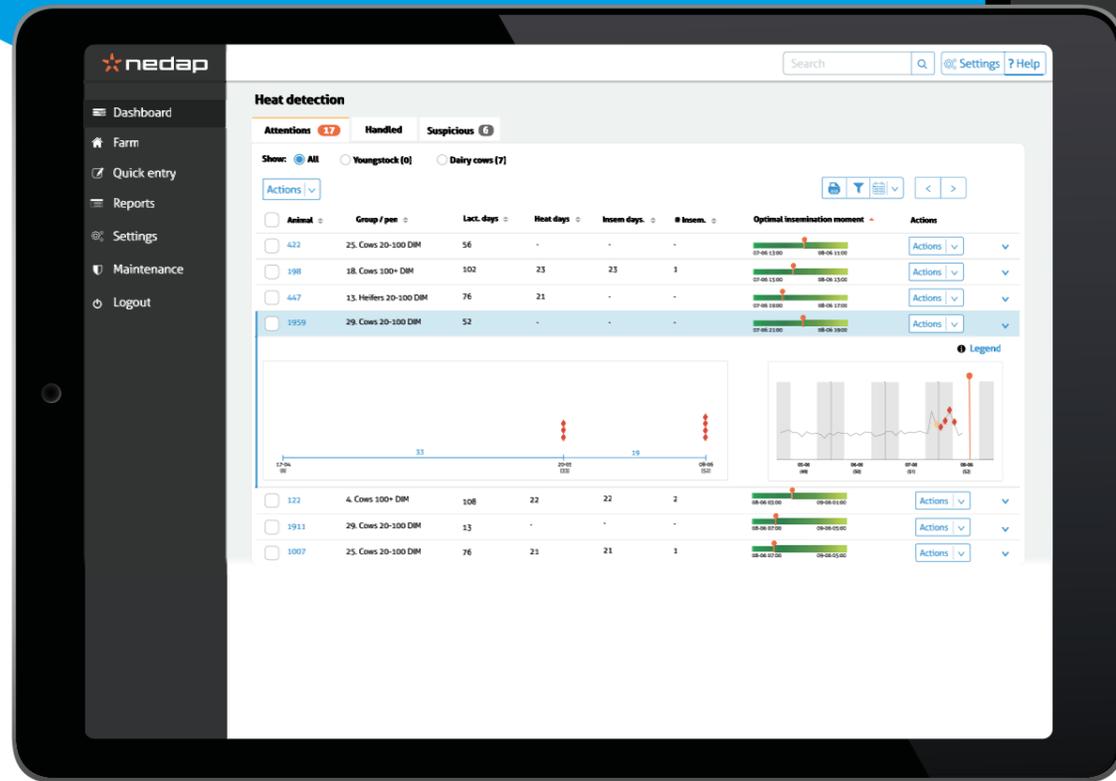
The right information at the right time for the right person. Anytime and anywhere.

Heat Detection

Worklist of cows in heat, including advice on their optimal insemination moment for effective insemination with the highest chance of conception and additional reproduction insights.

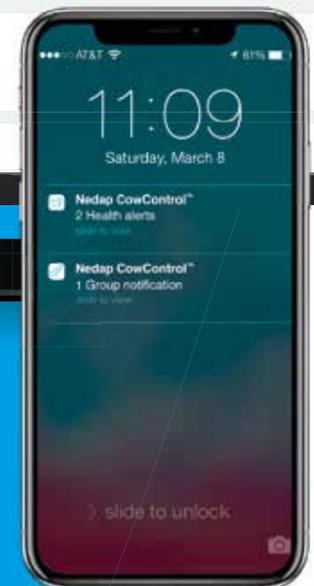
Dashboard

Widget-based overview of the most important alerts, to-do lists and reports.



Urgent attentions

Alerts when a cow or group shows such deviant behavior that urgent intervention is needed to prevent or solve problems.



Actionable herd insights

Real-time

User friendly presentation of relevant information about individual cows and groups.

Animals to check

Worklist of animals to check including report of their deviant behavior that provides insight into possible health issues of each cow on the list.

Health Monitoring

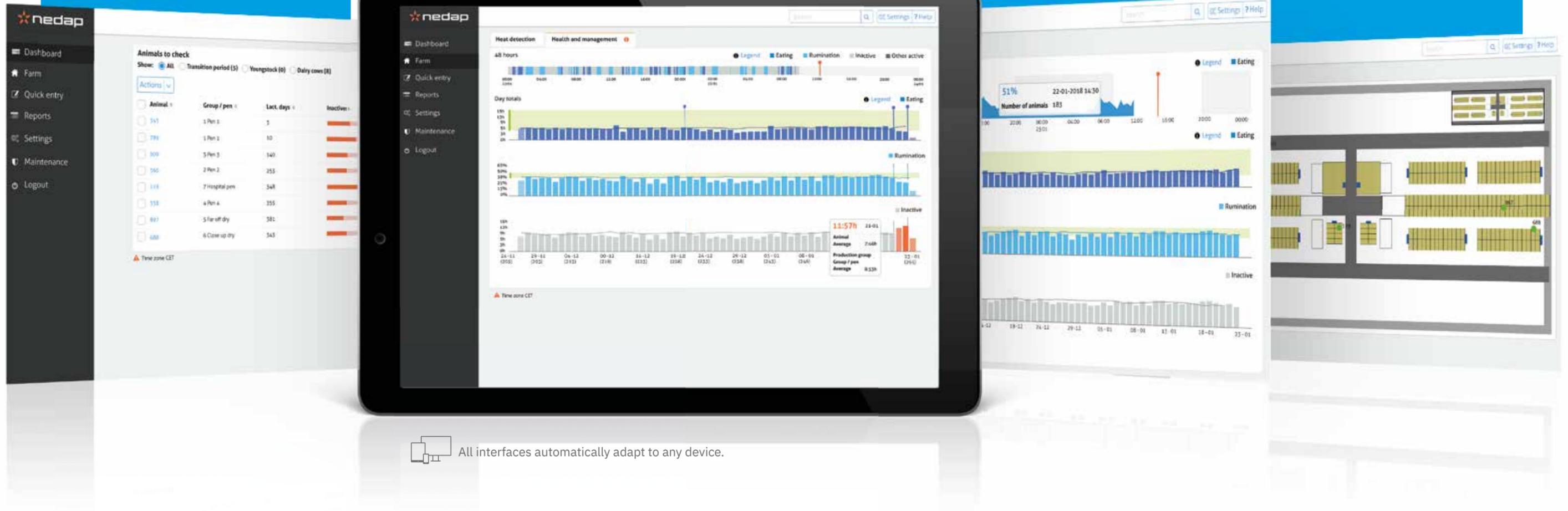
- * 48-hour report showing complete time spent of a cow across all activities.
- * 60 day reports showing her day totals per activity including group benchmark.

Herd Performance Trends

- * Group Eating Pattern: 48-hour report showing the percentage of all cows in a group eating simultaneously.
- * 60 day group reports showing day totals per activity including herd benchmark.

Cow Locating

The real-time location of single or multiple cows needing to be inseminated, checked, treated or fetched accurately shown on the barn map.

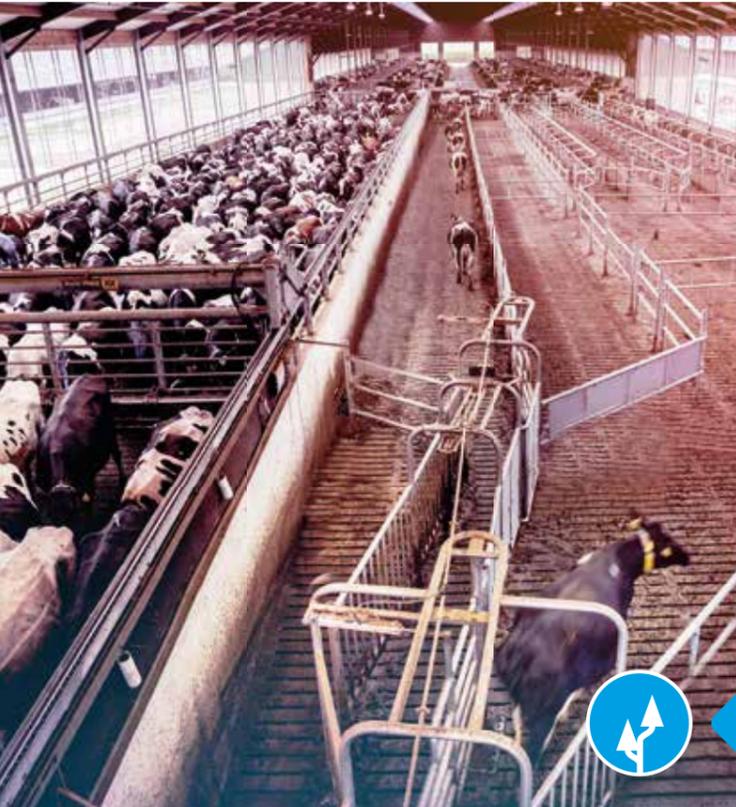


All interfaces automatically adapt to any device.

Watch demo videos of these interfaces on our Youtube channel: [youtube.com/nedaplivestockmanagement](https://www.youtube.com/nedaplivestockmanagement)

Integrate and Connect

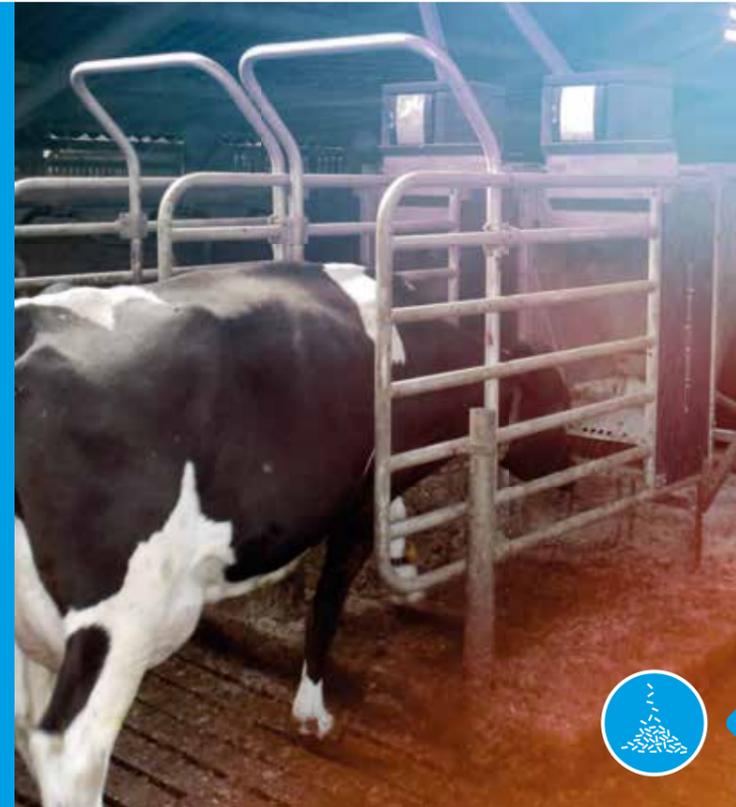
Connect your cows to your farm systems and dairy management programs with Nedap CowControl. Integrate with these additional Nedap solutions to add even more value.



Sorting and Routing

Control your cow flow. Save time and labor.

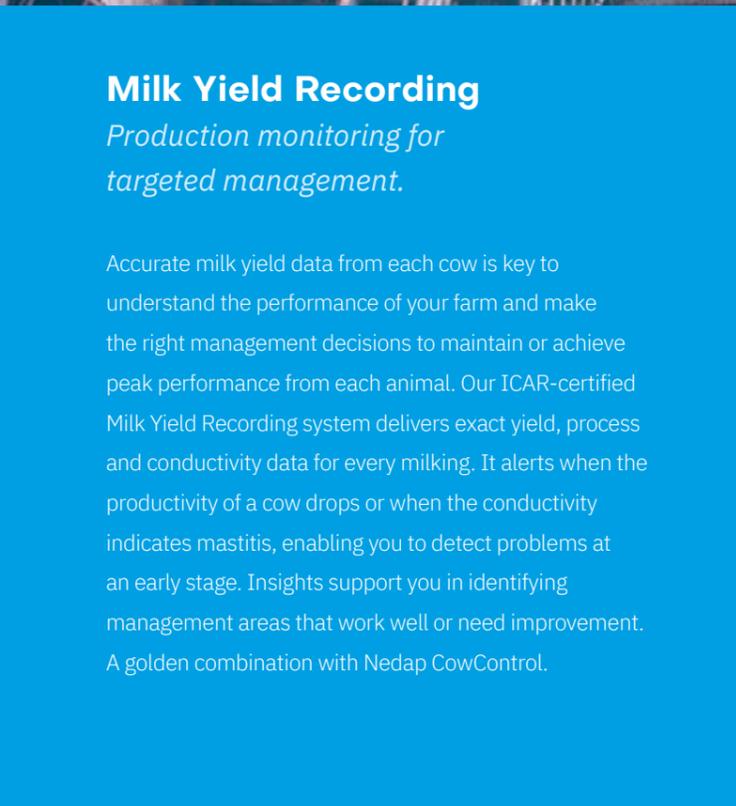
Nedap Sorting and Routing controls the entire cow flow on the farm. The processes of separating cows for treatment and routing cows to any specific location in the barn or to pasture are fully automated. This saves time and labor and facilitates controlled growth. Integration with Nedap CowControl makes it possible to automatically separate cows needing to be inseminated or treated according to heat and health alerts, without having to touch them a single time. This pushes farm efficiency to the next level.



Electronic Concentrate Feeding

Feeding for optimal production while saving costs.

Automatically feeding each cow the right concentrate at the right time in the right portion size allows you to achieve optimal production results, while saving on feed and labor costs. A win-win situation that puts you even more in control over the performance of each cow. Our feeding station follows a tailor-made feed curve per cow which supports peak condition and can be easily set up based on her milk production, lactation days, production group or as a fixed ration. It optimally spreads out her portions throughout the day and offers a comfortable, protected eating environment.



Milk Yield Recording

Production monitoring for targeted management.

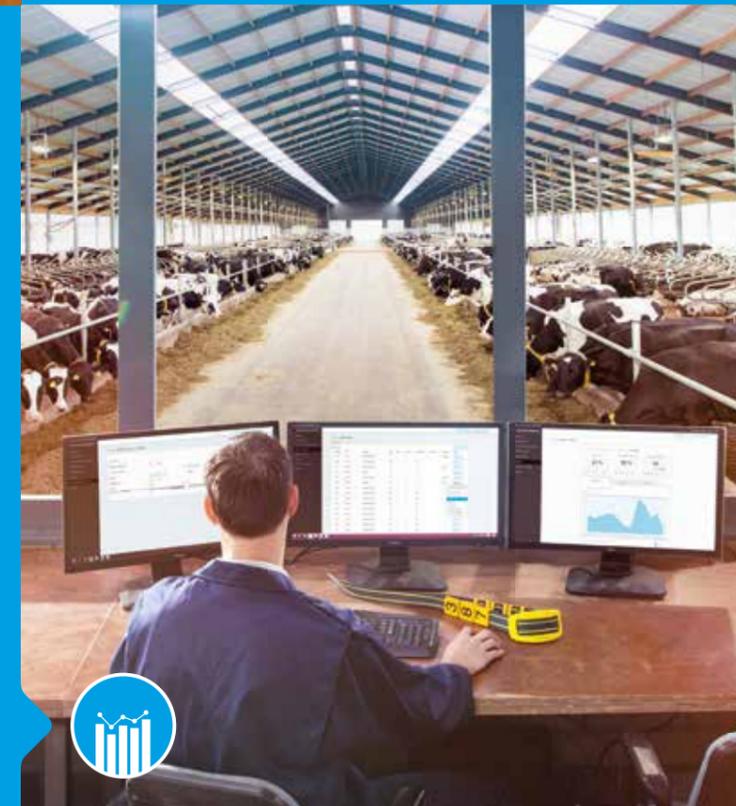
Accurate milk yield data from each cow is key to understand the performance of your farm and make the right management decisions to maintain or achieve peak performance from each animal. Our ICAR-certified Milk Yield Recording system delivers exact yield, process and conductivity data for every milking. It alerts when the productivity of a cow drops or when the conductivity indicates mastitis, enabling you to detect problems at an early stage. Insights support you in identifying management areas that work well or need improvement. A golden combination with Nedap CowControl.



Nedap Livestock Connect

Integrate with management programs. Increase efficiency.

Nedap CowControl easily integrates with all common dairy management programs. Thanks to advanced API connections and cloud integrations, cow data and calendar data can automatically be synchronized between systems. This prevents double entry, saving time and annoyance. The system also offers cutting-edge data exchange possibilities to integrate Nedap CowControl data into third party systems and vice versa, which only applies when the farmer gives permission. This adds value to the systems involved and ensures that various parties can optimally support the farmer.



Global knowledge base with local service and support

Distribution and support network

Leading international genetics and milking equipment suppliers partner with Nedap to include our technology in their solutions. Our distribution and support network ensures a global knowledge base with local service and support.

Find your Nedap distributor at

nedap.com/livestockmanagement

Combined forces to drive innovation

Nedap partners with universities, research institutes, veterinary organizations, distributors, end-users and other knowledge leaders in the livestock industry. Together we fully understand the market demands of today and tomorrow. We constantly keep pioneering, developing and evolving to empower our end-users with the latest and most advanced technology and knowledge available.

Nedap

At Nedap we develop Technology for life: products that help people become more productive, more successful and more meaningful in their professional lives. At the heart of our Technology for life philosophy is our drive to truly understand what people need to excel in their workplace. We make products that meet those needs, unlocking the power of purpose in people and changing the way they live their professional lives.

As a global leader in farming automation using individual animal identification Nedap Livestock Management helps thousands of farmers around the globe to become the best performing farmers in the world. Our systems help farmers manage millions of cows and pigs in more than 100 countries 24 hours a day.

nedap.com/livestockmanagement



Founded
1929



Exchange-listed
since 1947



7 business units
in-house



700 experts
worldwide



11 offices
worldwide



Nedap N.V.
Livestock Management
P.O. Box 104
7140 AC Groenlo
The Netherlands

T +31 (0)544 471 444
E livestockmanagement@nedap.com
W nedap.com/livestockmanagement

