

Lubratec®  
**smart**

Healthy Barn Climate made easy





## The future of agriculture is smart

Smart farming for maximum animal welfare

Today, digitalisation and automation are finding their way into all areas – including agriculture. A lot has happened here in recent years, especially in the area of technology: GPS, telemetry and autonomous driving are nothing new for farmers and are part of everyday life.

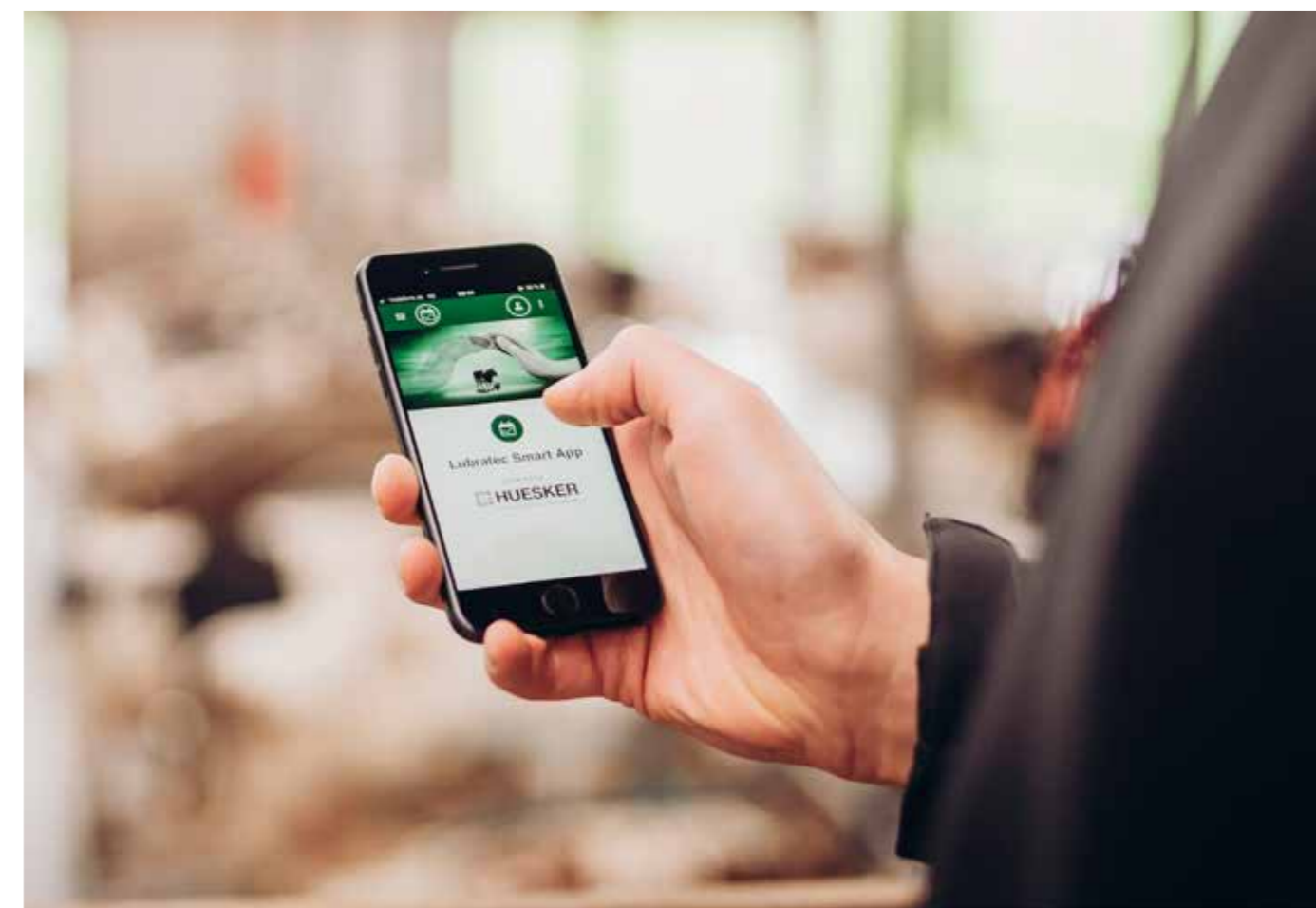
When it comes to smart farming, however, most people think of arable farming – and less of livestock buildings. But the barn is not only a central part of the farm, it is also one of the most complex. That is why we at HUESKER, with the Lubratec

brand, devote our full attention to the barn and offer a wide range of solutions. Because it is the habitat for your animals.

In order for your animals to feel completely comfortable, they need a perfect barn climate. With Lubratec Smart, we make an important contribution to this: innovative, smart and with a full focus on animal welfare.

Start into a new era of barn management – with Lubratec Smart!

- Page** 4–5 Lubratec
- Page** 6–7 Lubratec Smart
- Page** 8–9 Lubratec SmartBox
- Page** 10–11 Lubratec SmartApp
- Page** 12–13 Your way to Lubratec Smart
- Page** 14–15 The smart barn climate system



# Lubratec

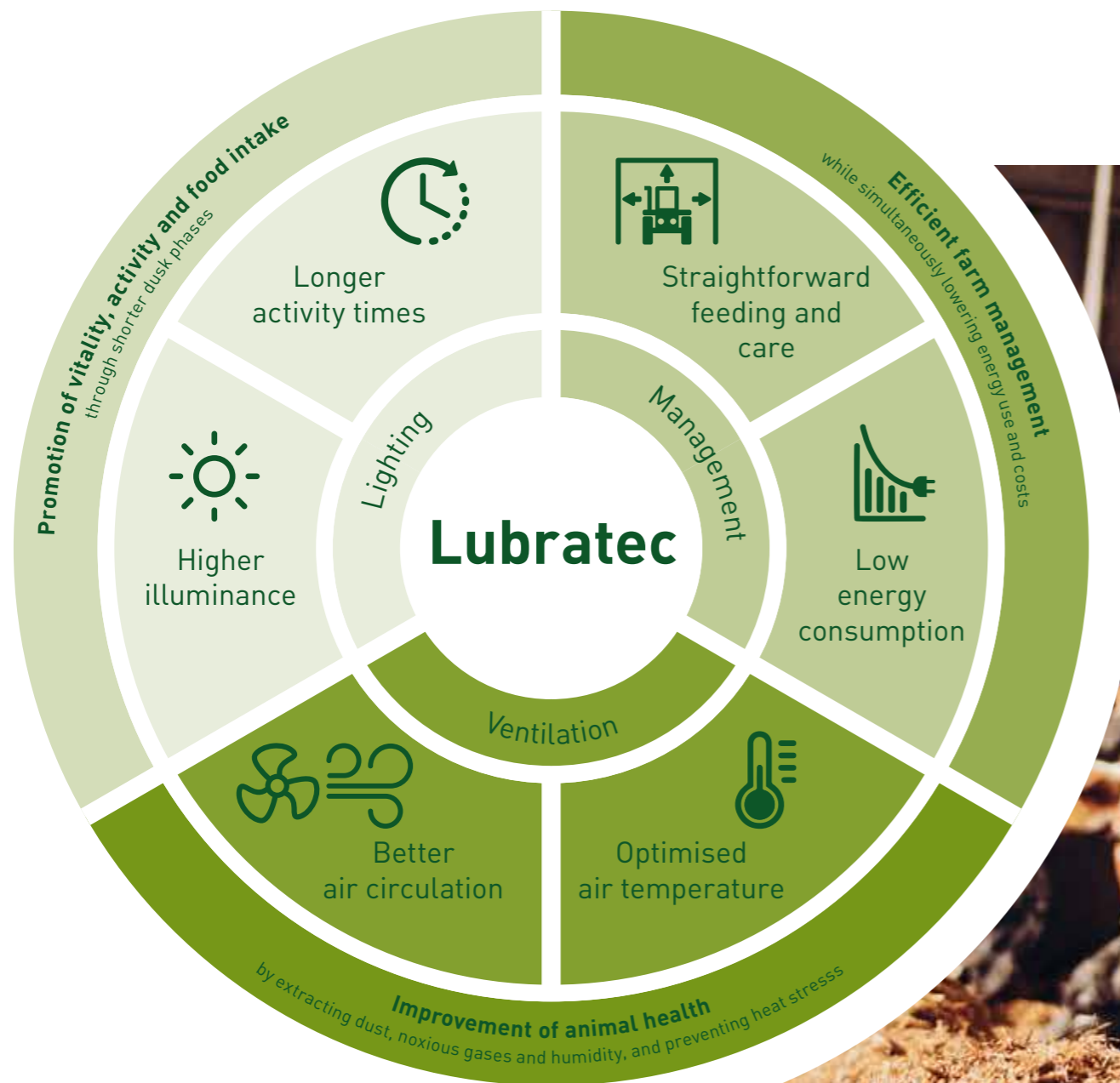
## The solution for animal-friendly farm management

The Lubratec brand offers you first class solutions for animal friendly livestock farming. With Lubratec products you promote the well-being of your animals by realising an optimal barn climate, at the

same time you support the species' own behaviour and reduce aerogenic infections. The high-grade, robust and durable systems will also improve the efficiency and flexibility of your farming operations.

## Expert knowledge for holistic climate concepts

By opting for Lubratec roll-up ventilation units, ventilation tubes, stretched systems, lift windows and fans, you will vastly improve the indoor conditions in your livestock buildings. A wide range of textile doors and fronts provide generous access for feeding and care while properly protecting your livestock, goods and machinery. Lubratec light ridges and LED lamps quite literally bring light into the darkness.



Promotion of animal-friendly livestock farming



Creation of healthy environmental conditions in barns



Improvement of animal health



Encouragement of natural behaviour



Simplification of farm management



# Lubratec Smart

## Maximum animal welfare through intelligent networking

With Lubratec Smart you get a perfectly coordinated complete solution consisting of hardware and software. Thanks to the smart measuring system and intelligent networking, you can be sure of an ideal barn climate at all times. And thanks to the visualisation of the measurement data, you always know how your animals are doing.

With Lubratec Smart, you can implement modern barn climate control technology through the intelligent networking of Lubratec ventilation and lighting products. Your benefit: You can control and regulate all products centrally. In the Lubratec SmartApp, you

always have a complete overview of your products and the respective settings. The barn climate measurements are transmitted via long-range radio technology. In this way, all data is sent energy-efficiently and smoothly over longer distances.

### 1. Lubratec SmartBox

The Lubratec SmartBox is a core element of the networked system. It permanently measures important climate data in relevant barn areas and sends it to the Lubratec SmartApp.

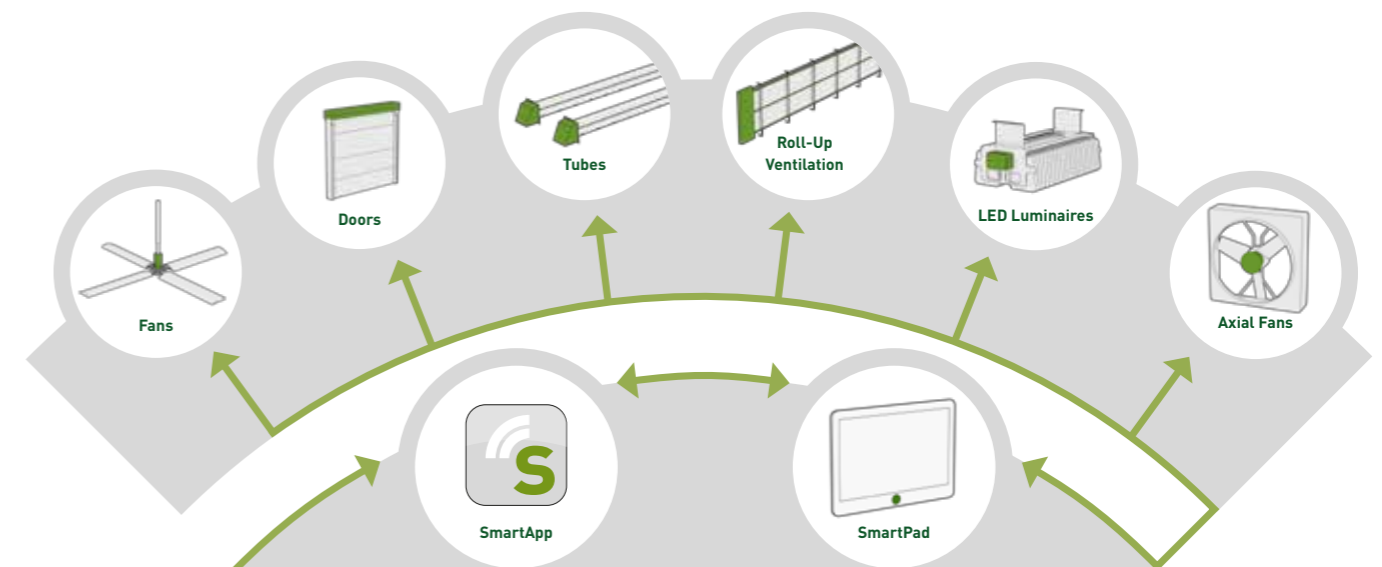


### 2. Lubratec SmartApp

The Lubratec SmartApp clearly processes all data from the Lubratec SmartBox and visualises the livestock building climate. It gives recommendations for action to improve the barn climate and documents developments and events.

### 3. Lubratec SmartPad

The Lubratec SmartPad is a central control unit that coordinates Lubratec products and sensors integrated into the system.



# Lubratec SmartBox

## Climate data in real time

The compact and extremely powerful Lubratec SmartBox monitors all important parameters of the barn climate that have a direct influence on the well-being of your animals.

The Lubratec SmartBox measures important data at climate-relevant points in your barns: High-precision individual and combined sensors reliably record the CO<sub>2</sub> concentration, ammonia content, current temperature, humidity and illuminance. The system also calculates the temperature-humidity index (THI) using current data for temperature and humidity. This way you will know immediately if heat stress is imminent in your livestock buildings.

The box housing is made of a high-quality ABS plastic, is low-maintenance and durable. The SmartBox

can be mounted quickly and securely on all surfaces, and integration into the system is uncomplicated. And you remain flexible at all times: If you make changes or expand your stalls, you can simply add more SmartBoxes to them.

With the help of the measurement data, you will always know how your animals are really doing. In this way, you can take targeted measures – or have them carried out automatically, to specifically increase the welfare of your animals.

## More animal welfare through reliable measured values

The sensitive sensors of the Lubratec SmartBox measure all values in real time and with high precision. You are flexible at all times: If you change or expand your stalls, you can simply move or add the SmartBoxes.

CO<sub>2</sub> **Carbon dioxide**

H<sub>2</sub>O **Humidity**

°C **Temperature**

NH<sub>3</sub> **Ammonia**

Lux **Illuminance**

°C/% **THI**

## Technical details at a glance

- Robust and dust-protected housing
- Power supply: 230 volt connection
- Data transmission: Long-range radio technology (LoRa)
- Calculation of the THI: by means of real-time data



# Lubratec SmartApp

## Your barn climate at a glance

The Lubratec SmartApp is the heart of your smart system: Here you can get a quick overview of the climate in your barns at any time. You also have the opportunity to receive individual recommendations for action to optimise the barn climate.

The browser-based Lubratec SmartApp provides you with all measured values in one central location. With just a few clicks you get a complete overview of your barn climate. You can see all current and historical measured values and make your own entries – for example to document events such as hoof care or unusual weather conditions.

But the Lubratec SmartApp goes one step further: on request, it gives you intelligent recommendations for action to improve the barn climate in order to increase animal welfare. This then gives you the

freedom to concentrate on other tasks. You can rely on it: if action is required, the app will send you a message directly.

You simply choose how much support you want from Lubratec Smart in everyday life: With our customised licensing model, you can quickly find the optimum range of functions for your individual needs. We would also be happy to advise you personally on the different licences so that you can achieve more animal welfare and an optimal barn climate on your farm.

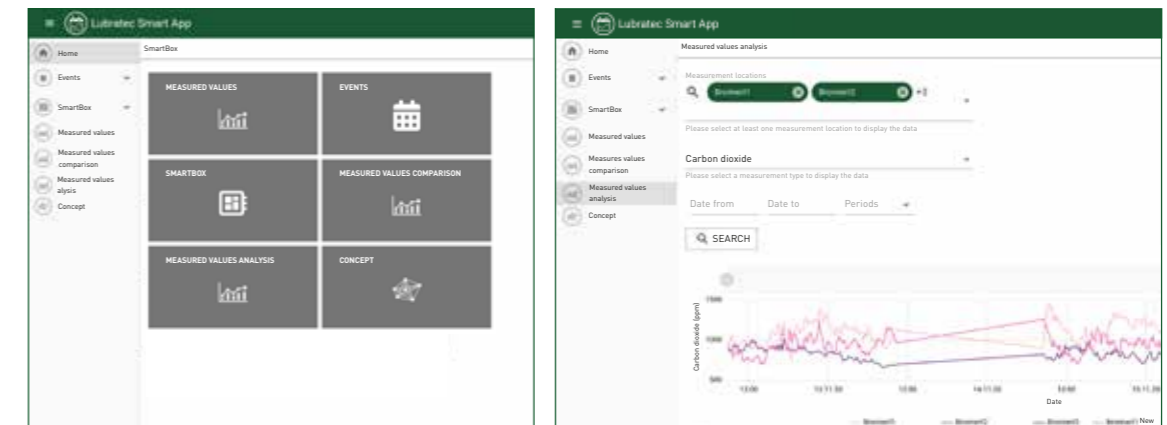
## Clear display of the measured values

The coloured traffic light system for all measured values enables you to check quickly: you can see immediately how well the barn climate is adapted to your animals. Deviations from recommended or individually set measured values are also displayed directly. The display is also possible as a curve diagram so that you can better follow the development of measured values. On request, a HUESKER barn climate consultant will support you in the interpretation of measured data.



## Quick access to all data

The Lubratec SmartApp offers you an intuitive interface that allows you to quickly switch between different menus. For example, you can select all SmartBoxes individually or control integrated ventilation and lighting products via app. Via the integrated animal welfare documentation, you have the possibility to document events such as hoof care, extreme heat, rainfall, storm or a feed change. In this way, you can better understand interrelationships and react in a targeted manner to negative effects.



## The Lubratec Smart performance levels

By selecting a Lubratec Smart licence, you simply decide for yourself which range of functions is optimal for you.

	Visual	Advice	Connect
Visualisation of the barn climate	✓	✓	✓
Better assessment through generally recommended limit values	✓	✓	✓
Analysis of the barn climate history	✓	✓	✓
Recommendations for action to optimise the barn climate		✓	✓
Set individual limit values		✓	✓
Event documentation		✓	✓
Automatic and intelligent regulation of the barn climate			✓

# Your way to Lubratec Smart

A few steps to a better livestock building climate

With us, you can easily find the right solution for your requirements: From the initial enquiry to the commissioning of Lubratec Smart, HUESKER is at your side as an experienced partner. To save you valuable time, we provide you with a complete package that focuses on your wishes. Our barn climate consultants are happy to take time for you, explain every detail and take care of the professional set-up of Lubratec Smart at your site. In this way, you can realise the best possible barn climate together with us in five steps. The first step towards a perfectly matched system is the barn climate check.

## 1 Arrange appointment

Send us your request and answer specific questions online – this way we can optimally prepare for the meeting in your barn. We will contact you promptly for a proposed appointment.

Book your individual livestock building climate check now at [www.barnclimatecheck.com](http://www.barnclimatecheck.com)

## 2 Barn climate check

During the joint livestock building inspection with you, a HUESKER consultant will carry out a thorough barn climate check. This will provide you with valuable information about the individual climate situation in your barn.

## 3 Analysis & Recommendation

After evaluating and analysing all the data from the barn climate check, our experts create an individual report for you – with all the important results and ways to improve your barn climate.

## 4 Advice & Order

Our barn climate consultant will explain the results and individual recommendations to you in a personal conversation. After clarifying all questions, you decide for yourself whether and to what extent you would like to use Lubratec Smart to increase animal welfare.

## 5 Installation & Setup

Our experts will take care of the complete installation and activation of the Lubratec Smart-Boxes at all relevant locations in your barns. If you wish, we can set up the SmartApp and integrate the measurement boxes into the system together with you. Finally, our advisor will explain all the functions of the app to you.

Do you still have questions or requests? Then contact us. We look forward to hearing from you!

## Barn climate check

Survey by HUESKER barn climate consultants

Joint tour:  
Overview of your livestock buildings

Installation of a mobile Lubratec SmartBox

Barn climate check with wind measurement, fog tests and thermal imaging camera

Brief preliminary discussion and explanation of the measurement results

Detailed evaluation and interpretation of the measurement results by the HUESKER team

Presentation of the results by a HUESKER barn climate consultant at your premises



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



# The smart barn climate system

Simply more animal welfare through intelligent solutions

The topic of animal welfare in agriculture is becoming more important again, and the workload for the farmer should be steadily reduced. Lubratec Smart intelligently brings these two points together. The barn climate system uses the climate data specifically for animal-friendly husbandry of livestock and the optimisation of farm processes. Resource-conserving management of the farm and healthy animals are the basis for your successful agricultural business.



Automated barn climate



Optimum animal welfare



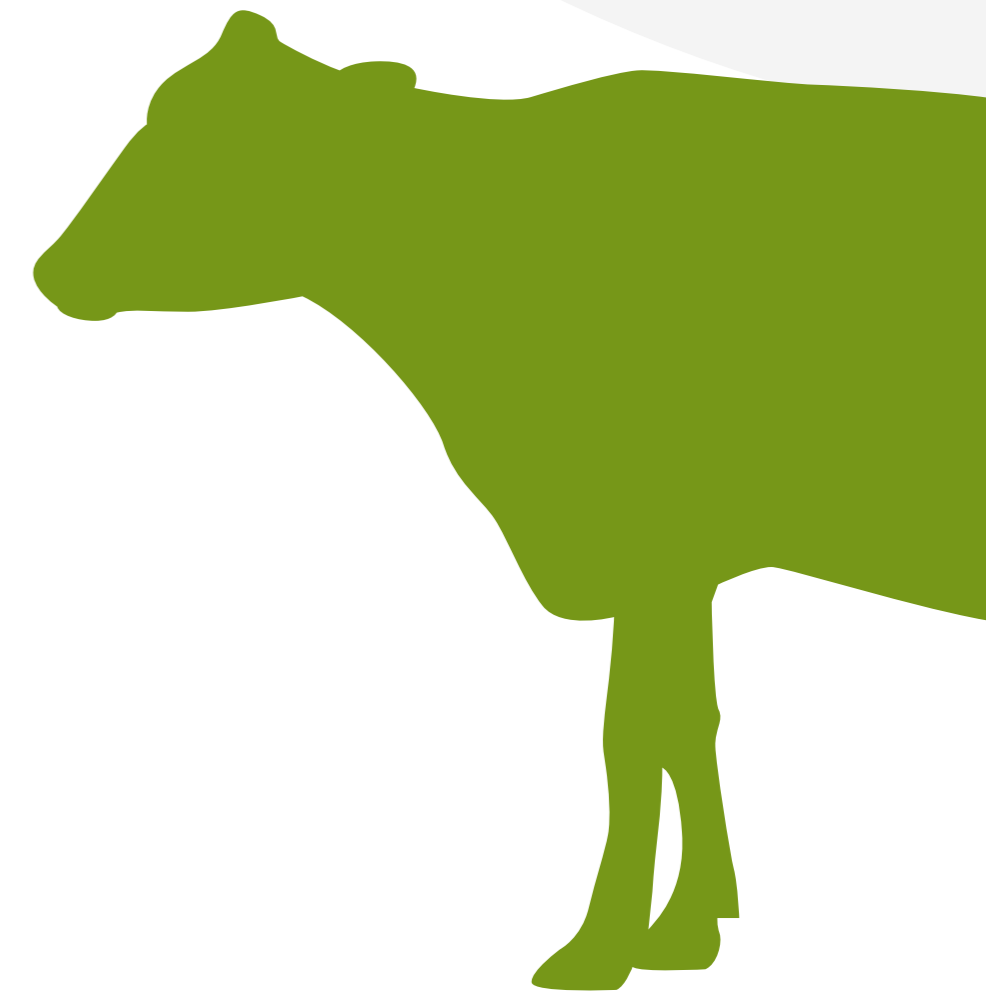
Efficiency increase



Visualisation of animal welfare



- The best possible barn climate in every season
- Avoidance of heat stress
- Promoting the performance of your livestock
- Minimisation of germs and harmful gases in the barn: fewer respiratory diseases
- Lower treatment costs and reduction of medication use
- Energy-efficient barn climate management
- High system security and simple operation
- Improve labour efficiency in your business





Lubratec® is a registered trademark of HUESKER Synthetic GmbH.  
HUESKER Synthetic is certified to ISO 9001, 14001 and ISO 50001.



**HUESKER Synthetic GmbH**

Fabrikstrasse 13-15  
48712 Gescher, Germany  
Phone: + 49 (0) 25 42 / 701 - 0  
Fax: + 49 (0) 25 42 / 701 - 499  
E-mail: [techtex@HUESKER.de](mailto:techtex@HUESKER.de)  
Web: [www.HUESKER.com](http://www.HUESKER.com)

Location Duellen  
Im Broemken 5  
48249 Duellen, Germany  
Phone: + 49 (0) 25 94 / 89 27 - 0  
Fax: + 49 (0) 25 94 / 89 27 - 890  
E-mail: [stallklima@HUESKER.de](mailto:stallklima@HUESKER.de)

**HUESKER**  
Ideen. Ingenieure. Innovationen.