Layers

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Securing operational management in the agricultural sector for the future

Fancom is the global leader in the development of automation systems for the intensive livestock husbandry sector. Our objective is to create the optimum conditions for our customers, both in the buildings that house the animals and in their operational management. We are convinced that the future landscape of livestock husbandry will be determined by the choices we make today. The exploding population rate and economic growth will result in a massive demand for animal proteins. Upscaling is therefore unavoidable. However, it should take place in a responsible and sustainable manner, with the fullest attention for transparency, food safety and animal welfare.

Fancom’s ambition with iFarming™ is to create a new, global benchmark for animal welfare in livestock husbandry systems. To make this ambition a reality we engage in a continual search for new, innovative technology that will help create efficient house management, and enable animal welfare to be measured. Consumers consider animal welfare to be paramount. The quality of food is not only determined by the safety of the end product, consumers also require safeguards about the welfare of the animals used to produce food.

iFarming™ is Fancom’s solution for future-proof animal husbandry. A solution designed to balance the interests of the animals and of all the stakeholders. Animal health and standards of animal welfare can be improved, emissions reduced and business profitability will remain guaranteed. This approach means we can have true significance for the farmer, the animals and society!

The livestock sector shows the way!
What does iFarming™ mean for you?

iFarming™ is not wishful thinking, it is a reality in daily practice. Growing numbers of layer farmers are reaping the benefits of this intelligent form of operational management. After all, you are faced by a market that is characterised by more rapid change than ever before. Spiralling costs for feed and energy are placing increasing pressure on your profit margins. In addition, the market demands sustainable and responsible production methods.

Upscaling and spreading activities over various different locations are becoming more common. However, you still want to be able to continually check the processes in your poultry houses. How is egg production progressing? How can I limit the number of floor eggs? What is the feed and water consumption? Are my hens healthy? All matters that you like to be in control of, and want to manage efficiently. iFarming™ makes sure you are in control.

Fancom’s iFarming™ offers you the tools for efficient daily management of your farm. iFarming™ is supported by our tried and tested systems for climate control, automatic feeding and biometrics. Our data management solutions integrate these elements so that they create valuable synergy.

The following pages describe our systems that are specifically tailored for applications in layer houses. Our systems suit all forms of poultry housing: layer hens reared in organic systems, floor based housing or (enriched) cage systems. The separate factors; an even climate, a sophisticated feeding system and accurate registration of the production process will provide you with tangible and immediate advantages in operational management.

Used as an integrated system, you can benefit from greater profitability, more efficient egg production and a lower impact on the environment. You can gradually start working towards an iFarm, while at the same time equipping yourself to answer the demands of the future for a license to produce. And what if different demands are set in the future? Then we will develop new, suitable solutions together with our customers. We call this ‘Forward thinking’. This is a commitment we can make because of our position as the leaders in our industry. With a clear vision of your profession, a continual desire to innovate and a keen eye for new, global market dynamics.

iFarming™ results in the following, immediate benefits:

• Better control of your operational processes
• Time gains
• Savings on costs for energy and feed
• Improved production
• Food safety guarantees
• Production methods that are kinder for the environment and for birds
iFarming™ starts by regulating an optimal climate in your houses, regardless of the outdoor conditions. Your birds are your living capital and the environment they live in influences their development. A good climate benefits the health of your animals and in turn the laying percentage and egg quality. In addition, it will save you costs for feed, water and energy.

Thanks to a good climate control system, extreme weather conditions and sharply fluctuating day and night temperatures will have no influence on the house climate. You, however, can exert an influence on a sustainable and profitable production process.

You are in control, not the conditions. Thanks to iFarming™.
Fancom has developed the OvoFlow™ climate system especially for layer houses. No matter what housing concept you use, you can rest assured the climate will be identical throughout the entire house. With OvoFlow™ the airflow can be controlled well, and air will be distributed even in systems with cages and nest boxes. Even the hatches that open in free-range houses have no influence on the ventilation pattern. The result is a constant flow of air without any draughts and with the right air quality for humans and animals.
• Outstanding laying percentage
• Improved egg quality
• High uniformity
• Lower mortality

The OvoFlow™ climate system is characterised by accurate minimum ventilation, which is necessary to extract harmful waste substances and supply oxygen-rich air to all the birds in the house.

Summer and winter inlets in the side wall, ceiling inlets and any extra ceiling fans are regulated perfectly. The system automatically takes into account extra fresh air to aerate the manure belt.

OvoFlow™ climate system

If the demand for ventilation increases, the system gradually switches to maximum ventilation to effectively remove the heat produced by the birds. This prevents animal stress and ensures a calming atmosphere in the house. In many cases, addition cooling in required in the form of cooling pads or misting.

A well-controlled climate will optimise the performance of your birds. The technical results are proof of the progress. Outstanding laying percentages, improved egg quality and lower mortality ensure optimal production results.

For many years, OvoFlow™ has been a tried and trusted ventilation system used in various climate zones all over the world. The system has proven its worth from the pole circle to the equator. Depending on the required house concept, OvoFlow™ has various versions of air inlet systems and exhaust fans for installation in the ridge or walls. There is a suitable ventilation system for every type of house.

As an iFarmer you can immediately enjoy the benefits of the OvoFlow™ climate system and lay the right foundations for iFarming™. You can guarantee that the eggs you supply will boast an unparalleled degree of uniformity and excellent quality.
A suitable ventilation system for every house

- With combi-ventilation, the fresh air enters the house already well-distributed through inlets in the side walls and is exhausted by fans installed in the ridge of the house or in the side walls. For maximum ventilation, extra fans are activated in the end gables.

- A variation of combi-ventilation is the combi-tunnel system with large tunnel inlets at the front of the house. With maximum ventilation, the air inlets are fully closed and the tunnel inlets are opened as required. In addition, the fans in the rear gable are activated. This causes the so-called tunnel effect where air flows over the animals at great speed and creates a cooling breeze. If required, the tunnel inlets can be supplemented by cooling pads for extra cooling capacity.

- For additional cooling capacity, you can use the combi-double skin system. Double-skin is a unique cooling system. It differs from the customary cooling pad system as it allows air to be cooled over the entire length of the house on both sides. This results in an extremely even distribution of the cooled air, and consequently a highly uniform climate. Differences in temperature between the front and rear of the house are kept to a minimum. Incoming cooled air can be regulated well as it enters the building through the normal air inlets. This is also an attractive system from a financial perspective as no separate tunnel inlets have to be installed.
Automatically the best growing conditions

The specially developed climate computers automatically create the optimal conditions in every house. What distinguishes them from other climate computers is a number of unique control options:

- Identical conditions for all the birds thanks to complete climate control in eight zones.
- Savings on heating costs thanks to the Optisec™ control, that automatically harmonises heating and ventilation.
- The ideal effective temperature for the birds in the house using the HumiTemp™ control. This not only determines the ventilation level based on the temperature, but also takes the actual humidity level in the house into account.
- Signals any deviating feed and water doses at an early stage.
- Heat recovery and ammonia reduction using a fully integrated heat exchange control.

Intelligent lighting control

The climate computer features an extensive lighting control with eight light schedules so that an ideal day and night rhythm can be simulated with dim and dusk functions. Alongside controlling the main lighting, you can set automatic lighting of the drinking and feeding places in the correct order and light the nest boxes. Extra floor lighting to help limit the number of floor eggs can also be controlled automatically. Setting the controls is very easy, as all the lighting settings can be linked mutually and are also linked to the water and feed controls.

Climate equipment

Reliable equipment completes the system

All components of the Fancom climate systems are selected for outstanding quality, reliability and functionality. They are the heart of the company and will never let you down.

We supply energy efficient fans, air inlets, tunnel inlets, winch motors, chimney systems, and efficient cooling and heating systems. This allows us to create the optimal conditions in every house.

All Fancom equipment is ifarm-proof. Developments and innovations in the future can be seamlessly integrated into your existing equipment. We call this ‘Forward thinking’.

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I am really happy about the way we work with Fancom. Fancom looks ahead and introduces new technology that helps improve the processes in my houses. That's what I strive to do with my farm, use technology that will enhance my efficiency, but also animal welfare.

*With iFarming, I am ready to face the future.*
The second crucial pillar within the iFarming™ concept is an efficient feeding system. Feed costs are an important cost item for your company. No wonder that you want to keep these costs in check in a smart way.

The Fancom feeding systems help you to accurately control the amount of feed given. Feed, water and light are synchronised under all circumstances. So you can steer towards optimal egg production.
Feeding

Manageable feed costs

As each house is different, iFarming™ offers a variety of solutions for feeding systems, both with silo weighing and batch weighing. You can easily adapt the feed composition and steer towards improving the egg quality. This saves time and helps you keep the cost price of feed and the production results under control.
EasyBin™
the simple silo weighing system

EasyBin™ is Fancom’s simple silo weighing system where the silo is weighed using weighing bars or load cells. The F40 transports the feed directly from the silo to the hoppers in the house, so that large amounts of feed can be distributed in a short space of time. Robust load cells are used to ensure reliable weighing. The influence of temperature differences and wind influences on the silo are automatically compensated for. EasyBin™ is the only silo weighing system that enables simultaneous bulking and feeding without affecting feed consumption registration.

A variation on the EasyBin™ system is the use of one or more day silos on weighing bars. The daily amount of feed required is supplied from the stock silo and stored temporarily and weighed in a silo for daily use.

This results in the following advantages for you:
• Accurate control from silo to pan feeder
• Feed large amounts quickly
• Actual silo content always visible
• Insight into feed consumption
• Save on feed costs
Fancom’s batch weighing systems use a batch weigher positioned between the silo and the hoppers in the house to accurately distribute large amounts of feed in small batches. EasyBatch™ is specially for situations where feed does not need to be mixed, whereas EasyBlend™ can mix two types of feed or add cereal products.

The F41 and F42 feed computers accurately control the entire process, from preparing the feed in the batch weigher and filling the hoppers in the house right up to supplying the feeding lines in the house. A manual operation unit (optional) allows you to operate the feeding system by hand should a malfunction unexpectedly occur. iFarming™ gives you complete control. When the silo is empty, the system automatically switches to another silo that contains the same type of feed. The daily amount of feed and mixing ratio can be preset in a feed curve.

iFarming™ gives you complete control.

Reliable equipment completes the system

Fancom supplies complete installations, including all the peripheral equipment such as weighers, mixers and load cells. All the component parts are specially selected for reliability and functionality so that you can rely on years of trouble free operation from your Fancom installation.

This results in the following advantages for you:

- Complete automatic control of the feeding process
- Manageable feed costs
- Efficient feed management
- You can add your own ingredients
My highest costs are for feed and I want to deal that in the best way I can. I can accurately optimise the amount to suit my birds’ needs. This really saves time and helps me keep control of the cost price of feed. And keeps the egg production optimal.

Farming gives me control over my feed costs.
Fancom has developed a series of accurate and reliable biometric systems that observe and inspect animal behaviour and the production process.
These biometric systems constitute the third, vital pillar that supports iFarming™
Egg counting and egg belt control

Continuous insight into egg production
Fancom’s 746 egg counting system doesn’t just provide a reliable count of egg production, it also gives you insight into how production is progressing at any given moment. Production differences per row caused by malfunctions or disease show up immediately. An egg counting system can also help you identify inadequate ventilation or poor feed and water consumption, which would otherwise have a negative impact on egg production, at an early stage.

Optimise packing capacity - flow control
The 746 automatically regulates the speed of the egg belts so that the supply on the collection belt is always precisely geared to the packing capacity. This saves a huge amount of time. In addition, it offers the added bonus of fewer start/stops, thereby considerably reducing the risk of cracked eggs.
The ideal solution for every type of housing

Thanks to a faster readout and control, the 746 prevents any gaps in the flow of eggs caused by empty nest boxes. With cage housing systems, the 746 ensures that all the houses are emptied simultaneously and takes a pre-set mix of eggs from different houses into account if required. Automatic lift control is also possible.

The 746 registers production per day, per group and per counter, in numbers and laying percentages. The computer displays this data for today, and for the preceding period. The most important production data is presented in clear weekly overviews. This information is automatically saved for 70 weeks.

Electronic egg counters

The counter is completely sealed and therefore resistant to the aggressive conditions in a layer house, even when the houses are being sprayed clean. The counters use infrared technology to count the eggs without touching them. This prevents unnecessary damage and soiling. Small counters are available for mounting on the egg belts and larger counters for mounting on the collection belt.

The results

- Continuous insight into egg production
- Automatic egg belt control
- Saves time at egg collection
Animal weighing and robust weighing scale

Continuous weighing your birds provides an up-to-date overview of the conditions in your house and insight into animal activity. Abnormalities are visible more quickly, so you can take timely intervention to prevent losses in egg production.

Fancom’s range offers two reliable animal weighing systems: The F47 is a handy control computer with one or two weighing scales. It weighs all the birds in one house. The 747, with the same features, can be used in a maximum of eight houses. This gives a reliable impression of the current situation. And, very importantly, causes your birds no stress.

Robust weighing scale

The electronic weighing scale is made of robust material. The scales are easy to clean and can be calibrated accurately by the user. Practical experience has shown that even after years of intensive use the system still weighs with high accuracy.

The results

- Permanent insight into the condition of your birds
- Prevents egg production losses
- Stress-free weighing
The F38 features a special water monitoring program that enables up to eight separate water lines or groups, or the consumption in the entire house, to be registered hourly. The water consumption of layers is one of the simplest, but above all most accurate tools, that a layer farmer can use to monitor the performance of the birds. Differences between the water lines mutually, or between yesterday’s and today’s figures are immediately visible. This allows timely intervention in the event of problems, often even before a problem has had the chance to have any negative effects on egg production.

The computer also generates alerts if the minimum and maximum flow rate for each line or in each house is exceeded so that any leaks in the system can be identified quickly.

Water registration also helps adequate vaccination. It is important for a vaccine to be absorbed as quickly as possible in order for it to be effective and it is vital that layer farmers know precisely when water consumption is maximal.

### The results
- Continuous insight into water consumption
- Early warning system for abnormalities
- Effective vaccination
As far as I am concerned there is only one way to assess animal welfare, and that is by observing the signals given by the birds themselves. That's why I use systems that allow me to react adequately and immediately to any anomalies and limit production losses during the cycle.

Farming gives me the tools to respond rapidly to my birds' needs.
The automated climate, feed and biometric processes in your house form a valuable, almost indispensable source of information about the conditions the birds are living in, their individual behaviour and the feed and water consumption.

The unifying link with iFarming™ is our management software. This software automatically gathers, processes and presents the information in clear tables and easy to read graphs. The result is a wealth of management data that allows you to steer towards improvements based on facts and figures. Registration is learning!
Profit from the ease of a perfect overview

FarmManager™ software links you to your houses 24 hours a day. You can check on the situation in the house, no matter where you are in the world. FarmManager™ combines the data from your process computers in the house and presents the information in clear overviews, graphs and tables. Any alarms can be sent to your PC, tablet or smartphone. And, if necessary, you can adjust the settings in the control computers remotely to improve the processes in the house. This means you can do more in less time.

The result is a perfect overview of your company and insight into production costs and the technical performance of your birds. The system periodically generates e-mail reports containing the most important information from your control computers. This keeps you, or your advisor, up-to-date on the current state of affairs, no matter where you are.

FarmManager™ is a vital tool in your daily operational management, and helps you take crucial management decisions. Always in control thanks to iFarming™!

The results
• Remote control
• Handy overviews and graphs
• Sound daily management
• Time saving
FarmManager for Layers™

Compare and analyse to improve and simplify the process

FarmManager for Layers™ is a special, additional component in the FarmManager program. It registers and presents the most important performance indicators in the house, such as feed and water consumption and egg production, in a clear dashboard.

FarmManager for Layers™ automatically combines the latest data from the climate, feed and egg counting computers in the house, so that you can monitor production daily and compare and benchmark the results. You can compare the latest information from your houses with the standard index figures, with the farm average, the flock average or with data from previous production cycles. This prevents any hasty decisions. FarmManager for Layers™ gives insight into your production results and helps you determine your break-even point at the right time.

The system generates useful overviews and house charts, configured to suit the levels of various users: service managers, production managers, farm managers, planners in feed plants and slaughterhouses etc.

The results

- A clear dashboard
- Permanent insight into the production process
- Abnormalities are visible at a glance
- Extensive analysis and benchmarking features
- Automatic data collection saves time and is more accurate

iFarming™ gives you complete control.
I used to be just a farmer, now I’m an agrarian entrepreneur.
From behind my PC I can see straight away what is going on in my houses, even when I am not actually present.
That helps me with all my important management decisions.

I have everything under control with iFarming.
Our involvement is not limited to devising the most appropriate solution for your operational management. Choosing an automated system from Fancom means choosing a long-term commitment. An enduring partnership with the aim of taking your operational management to the next level.

We advise you about the installation that is customised to suit your farm and your specific wishes and needs. For instance, our control computers can be incorporated into a clear operating panel. You will be sent a detailed report describing the complete installation and all its component parts. Comprehensive situation sketches describe the functioning of your installation and give a clear impression of what it will look like. This extensive report is free of obligation. You can make your own, carefully considered decisions in your own time. After all, choosing iFarming™ is something you only do once.

Fancom is also synonymous with optimal project supervision and guidance. Depending on the individual situation, this advice can take the form of logistic planning, advice during installation (supervision) right up to commissioning the installation and training the operators.

Even when your installation is up and running, Fancom can be contacted for consultancy services and customised advice. We supply extensive farm reports based on data generated by the integrated Fancom systems and advise you on the optimal use of peripheral equipment and control computers. Our network of specialised Fancom distributors worldwide means you can always rely on professional, local support.

We actively contribute to improving your business processes, optimising your profitability and answering the challenges presented by animal welfare and sustainability so that you can continue to comply with the requirements for a license to produce.

Fancom services

Partnership
Fancom
Firmly rooted in intensive livestock husbandry

Fancom knows the intensive livestock husbandry sector inside out. We have been based since 1977 at the heart of a region with the highest concentration of pigs and poultry in the Netherlands: Panningen, in Limburg. Our company is part of the American enterprise CTB Incorporated.

We innovate and automate processes in the intensive livestock husbandry sector. We collaborate intensively with renowned universities and research institutes on new developments. Producers active in livestock husbandry can benefit from our years of experience in this domain.

The solutions we offer are not just valued and appreciated regionally, but on a global scale. We export to more than 50 countries worldwide. Our ambition is unparalleled and reflected in our strong growth.

We are convinced that we should take our responsibility today to secure the future of animal husbandry for tomorrow. iFarming™ has a crucial role to play in this respect. Utilising new technology and knowledge unites social and economic aspects and creates solutions for the animal husbandry sector of the future. A future that balances the interests of producers, consumers and society in general.