



POULTRY

# Hatchery Automation

## Maximize Hatchery Performance

The Viscon Expertise:

- ✓ Design & consulting
- ✓ Future-proof automation
- ✓ Service & training
- ✓ Business intelligence



# About

Beginning in the 1990's, Viscon Hatchery Automation has grown and developed with the industry and today stands as one of the market leaders in intelligent automation solutions for broiler, layer and breeder hatcheries worldwide.

While building on expertise with research, continual innovation and a pragmatic approach, each project undertaken whether it be standalone machinery, modifying an existing hatchery or helping to build some of the world's largest hatcheries, has allowed Viscon to become a specialist in the field. With a flexible approach, Viscon can adapt each and every component of its hatchery automation processes to any incubator brand and configuration found on the market today. While it is still relevant today, automation for us has become more than just a way to reduce costs or improve on operational efficiencies. Viscon has diversified its automation capabilities to be able to offer you more. Topics like health, hygiene, disease prevention and traceability are just mere examples of what our automation can help achieve. By promoting the ability to perform in-house manufacturing, a fully customizable and transparent experience is achieved with every stage from inquiry to aftersales service.

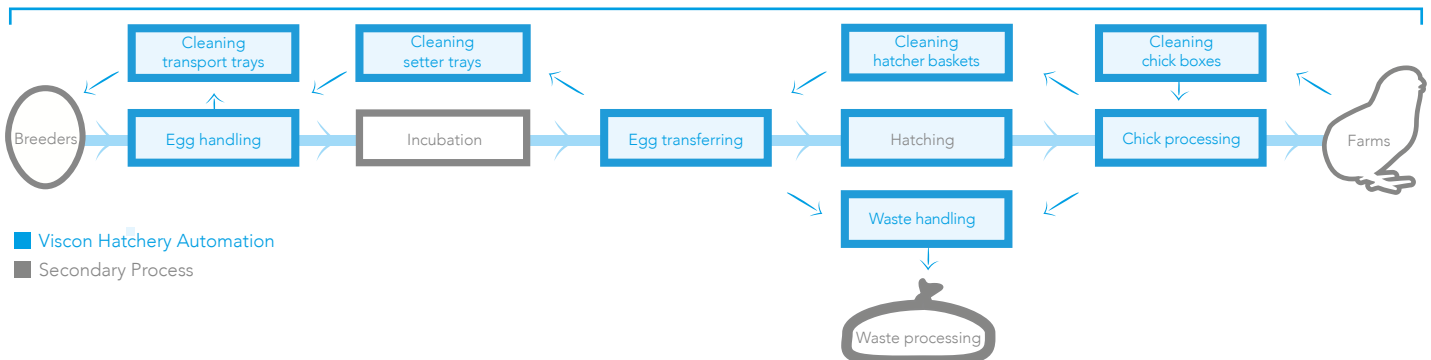
## Sign up for our newsletter

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## Hatchery Automation from A to Z

TREGG<sup>sm</sup> Data Intelligence





## POULTRY

# Egg Handling

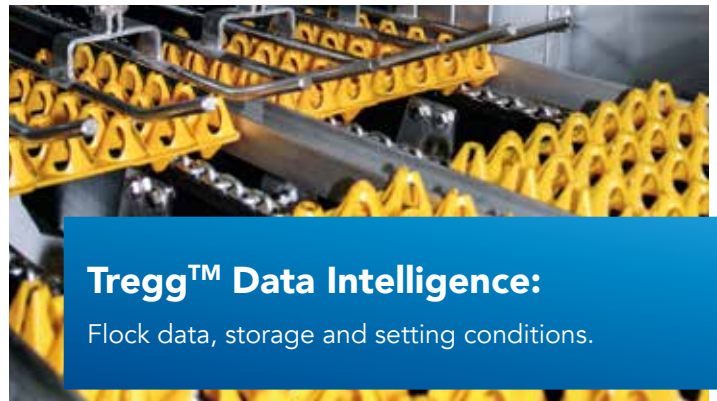
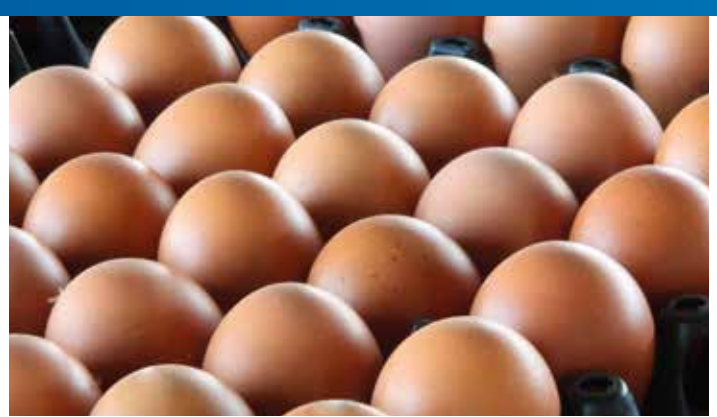
Every hatchery aims to fully utilize the hatching potential of the eggs that enter its facility. This can only be achieved when the incoming eggs are held under optimum conditions till the moment they are placed in the incubator. These optimum conditions are created by a proper hygiene level, good storage conditions and delicate handling in the egg room.

From the start we design the entire egg room to create an efficient and hygienic workflow. Based on the daily volume, we provide grading and labour saving machinery to quickly, efficiently and carefully process the eggs according to your specific needs. Our high quality washing machines ensure that trays and trolleys are optimally clean, before returning to the breeder farms.



## Our delivery programm

- ✓ Egg grading
- ✓ Egg transferring from farm to setter trays
- ✓ Tray transferring from farm to setter trolley
- ✓ (Un)loading of trolleys
- ✓ Internal transportation
- ✓ Waste discharge
- ✓ Cleaning of trays and trolleys



**Tregg™ Data Intelligence:**

Flock data, storage and setting conditions.

A photograph of an industrial egg processing facility. The image shows a perspective view down a long, narrow aisle formed by metal frames. On both sides, there are conveyor belts with rollers, and numerous brown eggs are visible on them. In the center of the aisle, a mechanical device, possibly a sorting or weighing unit, is mounted on a track. The background is a perforated metal screen. The overall scene is clean and industrial.

We design the entire egg  
room to create **an efficient  
and hygienic workflow.**





# Egg Transferring

From the 18th day of the incubation process, eggs are transferred from the setter tray to the hatcher basket. The challenge with this procedure is to avoid eggs cooling down or being damaged, which have a negative influence on hatchability. Therefore the transfer process needs to be both quick and gentle. With the current increase of daily production volumes, labour costs and bio-security risks, reliable automation is essential to do this efficient and safe.



## Tregg™ Data Intelligence:

Accurate prediction of hatchability for each flock through Live Embryo Detection™.

Collected information: percentage of eggs with living embryos, infertile eggs, eggs with early and late dead embryos.



## Our delivery programm

- ✓ Unloading of setter trolleys
- ✓ Live Embryo Detection / Traditional egg candling
- ✓ In ovo vaccination – Vinovo Select Inject™
- ✓ Egg transfer from setter trays to hatcher baskets
- ✓ Stacking and loading of hatcher baskets and dollies
- ✓ Automatic storage for setter trays and trolleys
- ✓ Internal transportation
- ✓ Waste discharge
- ✓ Cleaning trays and trolleys

# Vinovo Select Line

The transfer room is the ideal place to collect pre-hatch management data. Our latest innovation the Live Embryo Detection™ accurately indicates which eggs contain a living embryo and classifies the non-viable eggs as infertile, early or late dead embryos. These figures are summarized per flock and can be used to predict hatching numbers and monitor the breeding and incubation performance.

Exactly knowing the content of each egg, also enables selective processing during *in ovo* vaccination, egg transfer and waste discharge. For this reason we have especially developed the VINOVO Select Inject™ *in ovo* vaccination machine and the Select Transfer™ machine. Both machines will only process the eggs that contain a living embryo.



**This technology gives you the maximum hygiene level during *in ovo* vaccination, transfer, hatching & chick processing.**

The infertile eggs and eggs with dead embryos (including rotten eggs / “bangers”) remain untouched in the setter tray and are processed in a separate waste room. This technology gives you the maximum bio-security during in-ovo vaccination, transfer, hatching and chick processing.

The Vinovo Select Line, which can process up to 70.000 eggs per hour (depending on application), consists of three modules:

- ✓ Live Embryo Detection™
- ✓ Vinovo Select Inject™
- ✓ Select Transfer™





A close-up photograph of a small, fluffy yellow chick being held gently in a person's hand. The chick is facing right, showing its orange beak and dark eye. The background is a soft, out-of-focus yellow. The text "Better protected & healthier birds" is overlaid in the bottom right corner.

Better protected &  
**healthier birds**



**Delicate** chick handling

# Chick Processing

When processing day-old chicks, many important factors need to be taken in to account to maintain chick quality. The daily production volume and the available time frame, demand in many cases a high throughput. On the other hand delicate chick handling is required to conform with the high standards of animal welfare. Precision and accuracy during additional operations such as gender sorting, vaccination and counting require special attention as well. Optimal working conditions of employees and collection of production data are a necessity in a modern hatchery.

With an efficient, space-saving and hygienic workflow combined with high quality automation, you are more capable of controlling these important factors. With automation you reduce the need for hatchery staff and improve chick handling. Ergonomic work positions and dust reduction systems creates a better work environment for the employees and reduces labour absence. Automated data collection from workstations and chick counters gives a clear sight of production figures and employer performance.

## Tregg™ Data Intelligence:

Flock production figures, hatch of fertile percentage, average chick weight, employment performance.

## Our delivery programm

- ✓ Unloading and de-stacking of hatcher baskets and dollies
- ✓ Dust / fluff reduction
- ✓ Chick separation
- ✓ Chick conveying, grading and counting
- ✓ Gender sorting (carousel and linear)
- ✓ Subcutaneous and spray vaccination equipment
- ✓ Loading of chick transport trolleys
- ✓ Humane chick culling





## POULTRY

# Cleaning & Storage

Each production cycle the product carriers (eg. setter trays, hatcher baskets, etc.) need to be cleaned, dried and stored to be re-used again the following production day. To prevent cross contamination the cleaning and drying results needs to be optimal, but also the products flow should be hygienic. Energy and water usage are a substantial cost factor in the daily operation of a hatchery in which an efficient cleaning solution can make a difference.

Our hatchery design avoids physical crossing of dirty and clean products by separating pre-soak, washing and clean storage areas. This reduces the risk of cross contamination. High quality industrial washing machines are available in various models with capacities ranging from 200 to 3.000 products per hour. Efficient heat exchangers and an optimal water re-circulation system gives the best washing result against the lowest usage of energy and water. We apply product specific air re-circulation dryers with water recuperation, which efficiently dries the products and reduces water usage.



## Our delivery programm

- ✓ Pre-soaking
- ✓ Cleaning & drying of all hatchery products
- ✓ Stacking and de-stacking
- ✓ Automatic storage and supply

# Waste Handling

A sustainable, hygienic and cost effective handling of waste is an increasing challenge for a modern hatchery operation. We provide different solutions to discharge, separate and store the different types of waste for resource recovery or disposal.

**A sustainable, hygienic and cost effective handling of waste.**



**Tregg™ Data Intelligence:**

Waste volumes, storage information.

## Our delivery programm

- ✓ Collection of infertile eggs
- ✓ Fluff/ dust reduction
- ✓ Tray and crate tipping
- ✓ Humane unhatched embryo and chick culling
- ✓ Vacuum discharge of debris
- ✓ Central storage of waste

# Service & training

## Scheduled servicing

By planning in scheduled maintenance, our engineers are able to support your hatchery performance by carrying out corrective and preventative maintenance. This approach has been specially designed with you in mind to ensure that the hatchery equipment operates with minimal downtime to promote dependability and reliability. By subscribing to our improved initiative, you can be rest assured that our service engineers will be at your facility on a fixed basis to help you in your performance.

## Training and support

Our specially designed training modules ensures a strategic balance between theory and practice is offered to your staff. The fundamentals learned in these modules allow for familiarity and appropriate accreditation to successfully operate the hatchery automation equipment. This results into not only ensuring that your staff can accurately identify and troubleshoot issues as they arise, but also that an indepth understanding is promoted, increasing the overall awareness of the in-ovo and hatchery operations.

## TREGG information system

TREGG has been specially and specifically designed for you in that it gathers, manages and helps you analyse the processes in your hatchery. Information relating to individual and group flock performance, automation processes and hatching results can be collated to help improve your understanding of your hatchery's overall performance. Further to this, the functionalities from TREGG can be utilized to aid the servicing and support aspect to your hatchery environment.





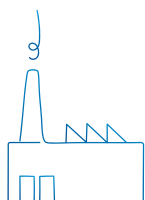
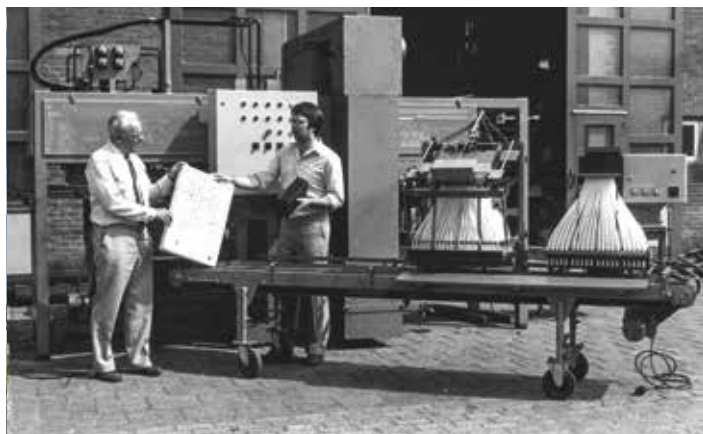
WHO WE ARE

# Viscon Group

We are passionate about Agro and Food processes and the limitless possibilities technology has to offer. Our software, machinery, and solutions enable the world to produce, distribute and enjoy healthy fresh food, flowers and plants. Since its establishment in 1927, the family-owned company has grown into an international organization, active in various Agro & Food sectors.

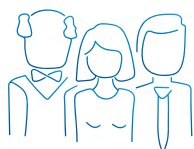
Our extensive experience in each market we operate in enables us to understand the operations, opportunities and challenges of our customers. This enables us to make the best production layouts for your company.

We design and build the entire process, combining Viscon automation with specific equipment sourced from carefully selected partners. This means you will always find the best solution. With Viscon you have access to a one-stop-shop. We design, we build and we fully integrate. We even add intelligent software to give you optimal control and management of your business.



**2**

Factories



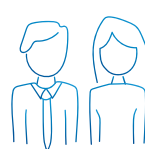
**3**

Generations of  
experience



**77+**

Countries with  
Viscon equipment



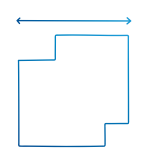
**300**

Colleagues



**6,000**

Cups of coffee  
a week



**23,000**

Square meters  
manufacturing facility

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