Better protected and healthier birds!

VINOVO

poultry health solutions

GENERAL BROCHURE

Vinovo ™

The next generation in safe In-Ovo vaccination

- ✔ **Optimum Hygiene**
- ✔ **Superior Vaccine Delivery**
- ✔ **Performance Reliability**

“

BETTER PROTECTED & HEALTHIER BIRDS

Discover In-Ovo

Today, In-Ovo vaccination is a proven method for application of various vaccines in a hatchery.

It offers many advantages over other (manual) post-hatch treatments, such as:

- Earlier immunity
- Uniform vaccine delivery
- Reduced stress for day old chicks
- Lower labor costs

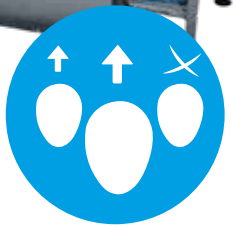
These advantages combined with the development of many new in ovo vaccines, capable of protecting the birds against various diseases for their complete lifespan, promises a great growth potential for this technology.

The process and technique used to deliver vaccines in ovo is essential, as the injection and delivery must be made to the precise location within the egg and requires the highest possible level of hygiene.

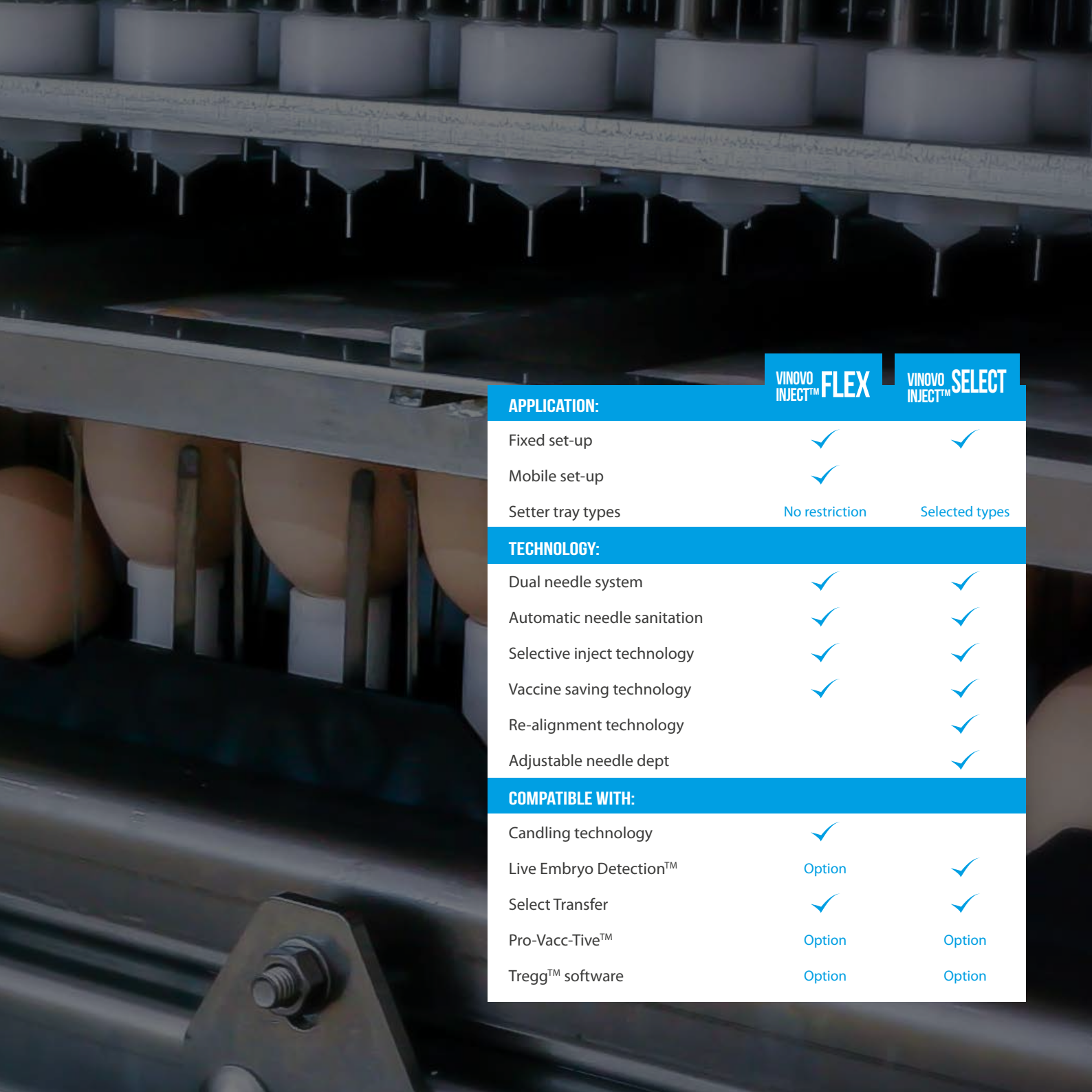
Based on these challenges, Viscon Hatchery Automation has developed the new standard in safe in ovo vaccination. This product line carries the new Viscon brand VINOVO and offers hatcheries a bio-secure solution that will improve health and welfare of chicks, starting from the earliest stage in the hatchery.

LIVE EMBRYO DETECTION

SELECT INJECT



SELECT TRANSFER



	VINOVO INJECT™ FLEX	VINOVO INJECT™ SELECT
APPLICATION:		
Fixed set-up	✓	✓
Mobile set-up	✓	
Setter tray types	No restriction	Selected types
TECHNOLOGY:		
Dual needle system	✓	✓
Automatic needle sanitation	✓	✓
Selective inject technology	✓	✓
Vaccine saving technology	✓	✓
Re-alignment technology		✓
Adjustable needle dept		✓
COMPATIBLE WITH:		
Candling technology	✓	
Live Embryo Detection™	Option	✓
Select Transfer	✓	✓
Pro-Vacc-Tive™	Option	Option
Tregg™ software	Option	Option

Vinovo Product Lines

VINOVO FLEX INJECT™

Vinovo Flex Inject is developed as a diverse alternative to the already existing Vinovo Select Inject. The Vinovo Flex carries with it the advanced features of Vinovo while offering **greater flexibility.** The Flex is diverse in nature due to the ability to handle **any setter tray configuration** on the market. A dynamic set up means that the Flex can act as a **mobile** and standalone solution or can be integrated into a fixed transfer line as well. Hatcheries of any size and age are able to benefit from In-Ovo vaccination with the use of the Vinovo Flex.

VINOVO SELECT INJECT™

Advanced features inbuilt within the Vinovo Select Inject allow greater confidence when it comes to the effective vaccination of the embryo. Through the **fully integrated set up** created with the Live Embryo Detection Unit, Vinovo Select Inject and Select Transfer unit, a highly advanced transfer process is achieved. The Vinovo Select Inject™ features patented re-alignment technology, ensuring that each egg is positioned straight whilst being injected, resulting in highest accuracy of vaccination.

Vinovo Technology

DUAL NEEDLE SYSTEM

A dual needle system, consisting of a punch to penetrate the eggs shell and an inside needle to dose the vaccine, ensures that each vaccination is given consistently and safe at the right location inside the egg. This is a proven technology that prevents damage or blockage of the needle and guarantees a durable and safe method of vaccine administration.

AUTOMATIC NEEDLE SANITATION

Needles and injection tooling are automatically sanitized and disinfected after each injection. This ensures a bio-secure vaccine administration and reduces the risk of cross-contamination from egg to egg.

SELECTIVE INJECT TECHNOLOGY

Selective inject technology starts off with the highly intelligent Live Embryo Detection. With the accurate classification of eggs, the viable eggs only undergo the vaccination process which optimizes hygiene. The harmful, non-viable eggs remain untouched in the setter tray preventing the cross contamination across the surrounding viable eggs and vaccination equipment. This ensures a bio-secure In-Ovo vaccination process.

VACCINE SAVING TECHNOLOGY

Accurate detection of living embryos ensures that only eggs with a living embryo receive an injection and not the non-viable eggs. In turn this means that vaccine is not wasted on the non-viable eggs, reducing vaccine wastage compared to traditional candling or egg remover systems.

RE-ALIGNMENT TECHNOLOGY

A better accuracy of vaccination is achieved by repositioning the viable eggs in a perfect straight position prior to injection. This is done by means of patented egg holders, which lift only the viable eggs gently from the setter tray and re-aligns them individually underneath the injection tooling. This ensures that each viable egg is punched at the top and center of the egg and the needle is moved to the correct compartment inside the egg (amnion cavity or embryo) to deliver the vaccine. Resulting in an effective vaccination.

ADJUSTABLE NEEDLE DEPTH

With varying egg sizes per flock, so too can the injection tooling be configured to fluctuate with the flock egg size. The possibility to adjust the needle depth improves the accuracy of vaccine placement and thus protection of the birds.

PRO-VACC-TIVE ™

Pro-Vacc-Tive™ ensures that vaccine dosage is controlled and guaranteed and needle blockages are detected. This is all achievable through the means of real-time monitoring of each individual needle to quality control the vaccine, sanitation protocol and needle, overall improving on efficiency and productivity.

LIVE EMBRYO DETECTION™

Heartbeat and candling technology

Indentifies:

- Living embryos
- Infertile eggs
- Early dead embryos
- Late dead embryos and rotten eggs

VINOVO SELECT INJECT ™ / VINOVO FLEX INJECT ™

- **Dual needle system**
- **Automatic needle sanitation**
- **Selective Inject technology**
- **Vaccine saving technology**
- **Re-alignment technology**
- **Adjustable needle dept**
- **Pro-Vacc-Tive™**

FULLY INTEGRATED

VINOVO SELECT TRANSFER ™

Live embryo transfer

By not transferring eggs that are rotten or have a dead embryo inside, the prevention of cross contamination of harmful bacteria over the healthy eggs or over the automation is achieved. This improves hygiene throughout the hatching process and chick processing, whereby health problems and use of antibiotics can be reduced.

Optimum hygiene

Non-viable eggs are a biological hazard, especially when they contain a dead embryo or are rotten. In many cases these eggs hold pathogenic bacteria, which can be transmitted by contact (e.g. needles or vacuum naps) or airborne when these eggs break or explode during take-out, injection or transfer. Giving an increased risk of contaminating other eggs and creating an enormous health challenge for the newborn chicks later on.

To solve this problem Viscon has redesigned the complete transfer process. This started with the development of a more accurate detection system, Live Embryo Detection™.

> Improved biosecurity levels.

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. Exactly knowing the content of each egg, enables selective processing during In-Ovo vaccination, egg transfer and waste discharge. The Vinovo Select Inject™ In-Ovo vaccination machine and the Select Transfer™ machine will only process the eggs that contain a living embryo.

First only the viable eggs are vaccinated and transferred to the hatcher baskets. The non-viable eggs (infertile and eggs with dead embryos) remain untouched in the setter tray, which is moved to a separate waste room where the infertile eggs can be taken out for resource recovery and the remaining dead eggs for disposal. Because this procedure takes place in a separate room and eggs with dead embryos or "bangers" do not enter the hatchers anymore, the spread of pathogens is prevented. Creating a more hygienic and safer environment for the chicks to hatch.

The 4 progression points in accuracy

1. Dual needle system:

Vinovo offers a dual needle system which utilizes a punch needle and injecting needle to carry out the injection method. Firstly, a robust punch penetrates the egg shell, hygienically clearing a path for the injecting needle. Following from this, the injecting needle is lowered under a lower pressure to administer the vaccine in either the amnion or embryo. This is a proven technology that is both durable and hygienic. Compared to single needle systems, it prevents damage or blockage of the needle and ensures for reliable vaccine delivery.

2. Re-alignment technology:

In a practical setting, eggs are never in a perfectly straight position in a setter tray. If these eggs are not corrected before injection, the possibility and risk for incorrect vaccine placement, egg breakage and/or damage to the embryo dramatically increases. This can result in lower efficacy rates of the vaccine and loss of hatchability.

Vinovo Select Inject™ is unique in this matter in that only the viable eggs are gently lifted of out the setter tray and are repositioned in a perpendicular position underneath the injection tooling using re-alignment technology. By incorporating re-alignment technology, the top of the egg is penetrated allowing the tip of the injecting needle to be positioned in the correct compartment inside the egg (amnion or embryo) to deliver the vaccine.

3. Adjustable needle depth:

To accommodate for the varying egg sizes or embryonic development between flocks, the needle depth can be calibrated per flock.

4. Pro-Vacc-Tive™:

This system has been specially designed to improve the quality of the vaccination process, monitoring in real time the vaccination and sanitation pathways of each individual needle. This integration improves on vaccine consistency, enhances quality control, increases machine up-time and allows for efficiency and responsive action to real-time issues.


VINOVO
VINOVO
poultry health solutions
DETERGENT
ALCOHOL
WATER

Performance reliability

TURN-KEY
HYGIENE
SOFTWARE CONTROL
UNIQUE
QUALITY
INNOVATION
ABF-PRODUCTION
WORLDWIDE
BIO-SECURITY
ANIMAL WELFARE

SCHEDULED SERVICING

TRAINING & SUPPORT

DATA MANAGEMENT

LOCAL PRESENCE

SCHEDULED SERVICING

By planning in scheduled maintenance on the Vinovo Select Line, 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 Vinovo Select Line 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 Vinovo Select Line. 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. Further to this, the development of our improved support program allows for peace of mind in ensuring that Vinovo has your interests at heart whenever you call upon us.

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.

TREGG™

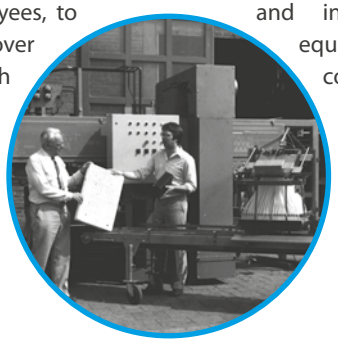
Viscon Group

Since 1927 our company has been involved in automation in the agro/ horticultural sector, where we started out in the Flax industry, the soft wire mater al used to produce clothing. This company was established by the great grandfather of the current generation owners, Jan Visser. After the demise in the flax business in 1967, the next Visser generation started to buy and sell equipment in the horticultural industry under the new company name 'Visser I.T.E.'. As the horticulture industry rapidly grew and diversified, it created a demand for custom made machinery. The Visser family took this opportunity and started to develop and manufacture their own machinery and provide custom made automation projects.

Years later, the experience and success in horticulture led to expansion in different Agro & Food related sectors, such as '**Fresh Produce**', **'Poultry**' and '**Food Logistics**', which were named 'Viscon': deducted from Visser Construction. In the last two decades the family company grew from approximately 40 employees, to over 200 employees active in different sectors all over the world. As for today, several business units, each dedicated to a specific industry, form the '**Viscon Group**'.

The Visser family DNA can be detected anywhere in the company: entrepreneurship, innovation, high technical standards and creativity have been the heartbeat of the organisation ever since they started designing and manufacturing themselves. Creating ideas, pouring enthusiasm, designing high end - high quality techniques and a worldwide focus is what the **Viscon Group** is all about.

The company is now being run by **Ton Visser**, **Els Visser** and CEO **René de Vos**. With Viscon Group we aim to create solutions for the smart movement of products in Agro & Food. We invite you to become part of the Viscon Experience where we provide expertise, consultancy and in house produced equipment for your company.



2
Factories

3
Generations of experience

77+
Countries with Viscon equipment

200
Colleagues

5,000
Cups of coffee a week

23,000 m^2
Manufacturing facility

Company building Netherlands

Company building Poland

LET'S KEEP IN CONTACT!

We engineer your success.
All over the world.

VISCON OFFICES
AGENTS

POSTAL ADDRESS

Viscon Group
P.O. Box 5103
3295 ZG 's-Gravendeel
The Netherlands

VISITORS ADDRESS

Viscon Group
Mijlweg 18
3295 KH 's-Gravendeel
The Netherlands

CONTACT

+ 31 (0) 78 673 98 98
info@viscon.eu
sales@viscon.eu
www.visconha.eu/vinovo