Think ahead with poultry people

Complete solutions for **layers**



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Think ahead with poultry people

The Vencomatic journey started more than 30 years ago with one man's breakthrough development in breeder housing: the first automatic breeder nest design. An innovation that characterizes the Vencomatic Group of today. We develop animal friendly poultry systems while preserving the planet.

We understand how valuable insights about the birds and activities in the house are. It is important to collect and analyze data, to see trends for insight information to be sure that poultry farmers can make the right decisions more quickly. With the products in the Meggsius family, we focus on smart technology to support the poultry farmer.

Our poultry professionals know what it takes to run a successful poultry farm, and we happily share this knowledge to help our customers make their business a success. *We've been there, challenge us!*

"To achieve the best possible results in table egg production it is essential that birds quickly find their way in a housing system. Positioning of water, feed and laying nests should follow the natural behaviour of the bird. In the rearing phase birds must be trained to jump to different levels to be able to access water and feed in an aviary system.

By bringing hardware and software closer together with the Meggsius family, we are able to measure and get much more detailed management information which gives the farmer full control."

John Bierens Sales Director Europe Vencomatic Group



Meggsius family

In today's world, we see an increasing dependency on data. More than just providing information on daily production, feed and water intake and climate conditions. Data will guide poultry farmers in their management and enable them to change from reactive to proactive and even to predictive. Poultry farmers are constantly looking for information to guide and improve their daily management. Vencomatic Group understands how valuable insights about the birds and activities in the house are. It is important to collect and analyze data, first to see trends for insight information to be sure that our farmers can make quicker the right decisions.

Connect the "Egg Way"

Egg Way

We're in the unique position that we have solutions for the entire "Egg Way". This allows us to connect data to every part of the process that together provide insights for our customers and allows them to make decisions faster and of course, get it right first time! For instance, why is the egg production 20% less in section X in house Y? Using data, we create insights and give management support to increase yield! *Lets meet the Meggius family!*

Meggsius Connect

All Meggsius products are ready to be connected to the Meggsius Connect. A platform that retrieves relevant data from the Meggsius devices and present them in a user-friendly dashboard. The possibility to combine this data with data from other devices in the house is also part of future developments, creating one overview for the poultry farmer.



Meggsius Control



The Meggsius Control provides total control over the entire egg flow. In combination with the Meggsius Count a constant egg flow to the packer is realized. The poultry farmer enters the capacity and the system runs automatically. There are several possibilities to collect the eggs on a farm, row by row, house by house or morning and afternoon turning. The complete poultry house configuration is programmed in the Meggsius Control with the length of the egg belts and conveyor belts. This results in a high degree of accurate identification where the egg is laid in the house to determine trends or solve any problems.

Meggsius Count



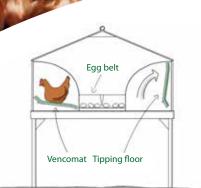
Meggsius Count automatically and accurately (99.7%) counts eggs using vision technology. This technology also ensures an accurate counting in dark and dusty houses. Each egg belt is counted individually instead of counting on a central conveyor belt. This ensures a clear insight into the production and allows a continuous egg collection. With the connection to the Meggius Control a fully automated egg collection will be achieved. Each egg line is individually controlled making it possible to achieve an 100% equal egg flow.





Top quality table eggs

From the very first moment an egg is laid until it reaches its final destination, a commercially produced egg travels a long journey. At Vencomatic Group we focus on perfecting every detail of this journey protecting eggs from damage or contamination. This journey starts in a Vencomatic nest, designed using smart innovations like the Vencomat, tipping floor and egg belt.



our key to success

Vencomatic Nest,

Vencomatic Nest

Reliability is the key to success for the Vencomatic Nest. The Vencomatic Nest offers a clean, sheltered place for the hen to lay her eggs, resulting in a high nest acceptance. The unique Vencomat in combination with the tipping floor ensures a smooth roll onto the egg belt. These components protect the eggs, preserving their perfect condition after lay.

We offer two types of nests: side belt or center belt. The nests haves a modular design, offering maximum flexibility and provide an optimum fit. The nests are available in different configurations to fit any farm layout and for integration in our aviary systems.

Flat roof (optional)



| Egg belt: | side belt or center belt |
|------------------|--------------------------|
| Number of tiers: | 1 or 2 tiers |
| Туре: | single or double |



Vencoslat, optimal hygiene

- Open structure improving hygiene;
- Strong and durable materials;
- Withstands all climate conditions.



Vencomat, for maximum comfort

- Comfortable nest flooring that attracts the hen;
- Maximum hygiene through open structure and minimum contact with the egg;
- Gentle roll of the egg towards the egg belt preventing cracked eggs.

Tipping floor, reliable closing system

- Expels birds to prevent broodiness and soiling;
- Lowest nest floor angle in the industry ensuring a gentle egg roll;
- Automatically tips out dust and dirt for a clean nest.



Egg belt, for gentle transport

- Unique design that prevents egg movement;
- Minimal contact between the egg and belt to secure egg quality and reduce contamination;
- Antistatic material for optimal hygiene.

Vencomatic Nest United Kingdom



Natural behaviour in aviary systems

Extensive studies of laying hen behaviour taught us that birds perform best in a system similar to their natural environment. This knowledge resulted in aviary systems with strategic positioning of water, feed, nests and perches. Hens therefore effortlessly find their way in Vencomatics aviary systems resulting in a calm flock with few floor eggs. A flock that can be perfectly managed for top laying performance.

Pleasant working environment - Our systems are designed with the poultry manager in mind. The open structure provides a good overview and maximum accessibility of the system, for easy inspection and cleaning. The result is a pleasant working environment for every poultry manager. **Durable** - Vencomatics aviary systems are made of durable materials, such as stainless steel, Zinc-Aluminium alloys and robust LED lighting. These materials and the solid construction withstand the challenging conditions in a poultry house, and assure:

- easy cleaning;
- long life span;
- energy efficiency.

Climate - Air quality in the house is excellent due to the integrated manure belts and aeration tubes, enabling instant manure drying. In combination with regular removal of manure, this leads to:

- · significant reductions in ammonia levels;
- · fresh air at bird level at all times;
- a healthy environment for bird and manager.

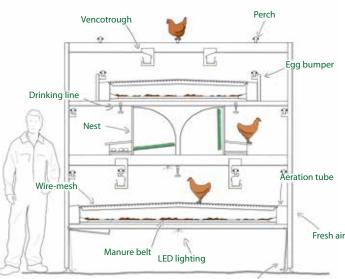
Bolegg Terrace

No other system has an open structure like the Bolegg Terrace. It is designed like a tree which combined with smart positioning of the perches, facilitates vertical movement of the hens. Without encountering any obstacles hens can move within the system and over its full length.

The nest is located at the heart of the Bolegg Terrace. Every morning hens descend from the perch to drink, eat and lay their eggs. The attractive and comfortable nest area minimizes eggs laid outside of the nest. Additional egg belts (optional) in the middle of the slatted floors ensure that eggs can also be collected there.

The Bolegg Terrace has wide and obstacle free corridors. The corridors and the open structure ensure:

- good visual access for easy inspection;
- an optimal light distribution minimizing floor eggs;
- a pleasant working environment;
- possibility for cleaning with a mini loader.



Wire-mesh separation

Bolegg Gallery

Bolegg Gallery is an aviary system offering comfort to both the bird and the poultry manager. The multi-tier system provides maximum living area, with easy accessible feed, water and nesting areas on one level. The system follows the proven treeconcept, stimulating bird movement throughout the system.

The clever design and construction of the Bolegg Gallery optimizes labour efficiency. This design allows for easy inspection and an internal walkway provides a good overview and access to all levels. Inspection of the nests is simple thanks to the winchable backwalls that give direct access to the nest and egg belt. Combined with easy operation of all processes, the Bolegg Gallery:

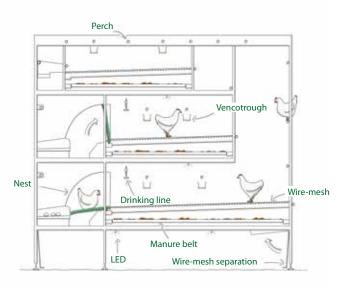
- offers easy management;
- enables efficient egg collection;
- prevents eggs remaining in the system;
- maximizes birds per house;
- guarantees a safe choice, regardless of the rearing system.

RED-L

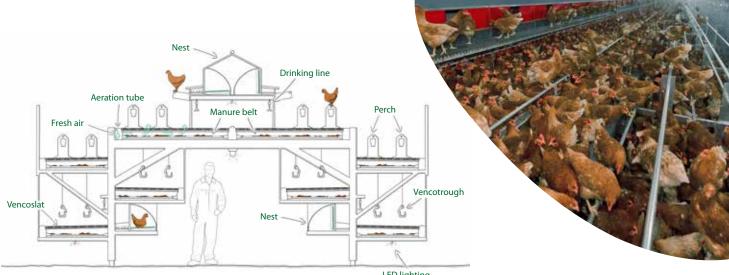
RED-L is the abbreviation of Resting, Eating, Drinking and Laying. Its' design integrates these basic needs in a unique porch structure. Hens experience the freedom to move from one level to another just as they would do in a tree following their natural instincts. The RED-L holds a large living surface within the system and 100% availability of floor space. With its many tiers and open structure the RED-L offers:

- optimal freedom for birds;
- water, feed, nests and perches on multiple levels;
- a maximum number of birds per house;
- easy access on all sides and levels for the poultry manager.

Managing aviary birds is easier than you think



The integration of Vencomatic nests on several tiers minimizes the number of eggs laid outside the nest. Furthermore, the possibility to close off the scratching area facilitates training and familiarization to their new surroundings upon arrival. This results in even better performance and an easy to manage flock.



LED lighting



Meggsius Detect

The system detects leaking eggs rolling off an egg belt onto the infeed conveyor of a Prinzen packer. When a wet leaky egg passes Meggsius Detect a short circuit occurs at the transition and the egg belt and the packer's infeed belt will stop. When a stop occurs a visual signal is given: the green signal lamp next to the detection changes color. After removing the leaky egg and cleaning, the system is simply restarted by pushing the signal button. This improves hygiene, with less cleaning work and ensures better egg quality.

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Egg transport systems

Eggs can be transported from different nest rows or houses to a central packing location.

Vencobelt

The Vencobelt is designed for gentle handling of eggs.

- Available in 40 and 55 cm widths;
- Capacities up to 45,000 eggs per hour;
- Slopes up to 35 degrees;
- Corners up to 180 degrees;
- Compact corners due to single drive chain.

Pegasus

Pegasus is the smart egg transport system for safe and efficient egg collection. With the Pegasus we keep the benefit of the incline belts while we decrease the use of space.

- Limited required space, small footprint;
- High capacity;
- Only 2 egg transfers;
- Flexible solution; rows don't need to be positioned straight above each other.



Bolegg Terrace

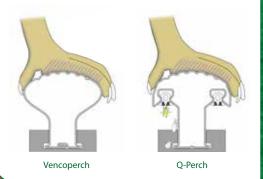
Germany





Perches

Vencoperch has a mushroom shape offering the birds a lot of benefits ensuring a comfortable rest. The unique mushroom shape of this perch is studied to be the most comfortable shape for birds. The Vencoperch offers stability and facilitates a safe landing. The ribbed top surface provides extra grip to facilitate movement through the system.



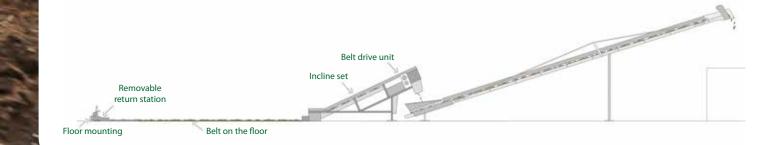
Q-Perch has the same shape and benefits as the Vencoperch with an additional mechanic solution that controls Poultry Red Mite. The Q-Perch is a perch containing two barriers, that kill red mite on their journey towards the chicken. There is a small electrical current running through the barriers with which the chickens can not come into contact, but is lethal for red mite.



Hercules Cross Conveyor

The durable Hercules Cross Conveyor, with its compact and simple design, is a reliable and easy way to remove manure out of the house. The frameless conveyor belt can be installed in both new and existing houses which makes the need for a manure pit redundant.

- Saves the significant cost of installing a manure channel;
- Provides a hygienic environment;
- Increases labour efficiency.



A good start is the key to success

Optimal rearing is essential for top performing laying hens. Vencomatic rearing systems prepare birds to find their way in a multitier system ensuring the best results in the production phase.

Training - Day-old chicks must be able to find feed and water directly after placement. Gradually they learn to jump to different levels and to rest on perches. This training guarantees strong performances of the birds once they are in an aviary system.

Natural instinct - Copying natural behaviour of a chick to the system allows for a smooth rearing process. Therefore rearing systems of Vencomatic are, like our aviary systems, based on natural bird behaviour.



Unistart

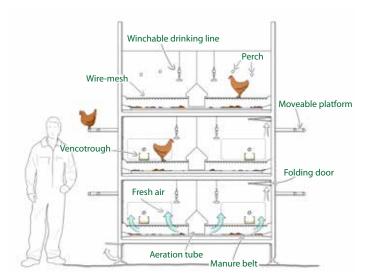
Unistart is an economical and easy to manage rearing system. It is configured in rows and gives the poultry manager full control over his birds. Thanks to its compact dimensions it fits in every house and allows a high number of birds per square meter of floor surface.

Day-old chicks are evenly spread over the compartments. After 4 weeks, when the training starts, the compartments open so the chicks can move through the house. The exterior platforms train them in vertical movement to all levels.

All moveable elements are centrally controlled by a motor or a hand winch at the front end of the row. Individual doors can be partially folded or opened by hand. Together with the open construction this allows for:

- excellent visual access;
- easy inspection, vaccination, catching;
- thorough cleaning.

All three levels are equipped with manure belts. As an extra option we offer aeration tubes to improve the climate in the house.

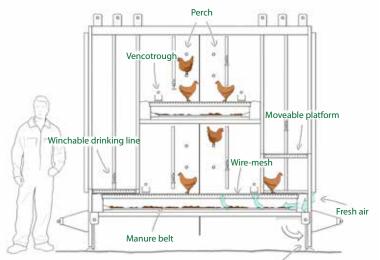


Bolegg Starter

With the Bolegg Starter you have an excellent training facility with optimal ease of use. In this row system with internal platforms, training of the chicks starts at day one. By winching the integrated platforms, water and feed levels are gradually pulled apart following the birds growth. This triggers the birds to jump to different levels in the system.

After 6 or 7 weeks the doors open and birds can move freely in the house. While the birds rest on the integrated perches at night, the poultry manager easily locks birds in the system for vaccination or catching.

All levels are equipped with manure belts and aeration tubes ensuring dry manure, fresh air at bird level and a good climate in the house. Rearing in the Bolegg Starter results in a uniform and healthy flock ready for life in an aviary system.



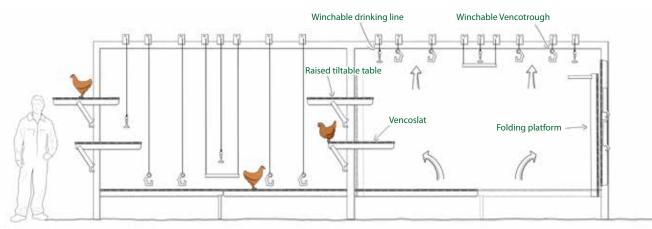
Wire-mesh separation

Jump Start

With the Jump Start you rear birds to be true athletes. Day-old chicks are placed on a slatted surface where they have direct access to feed and water. As birds grow the difference between feeding and drinking levels gradually increases so the birds learn to jump to different levels and perches. Hens reared in the Jump Start have had excellent training and will find their way in any aviary house. The unique porch system incorporates winchable feed and drinking lines, and hingeable platforms. This makes the Jump Start a very flexible system, with strong features:

- good visual overview;
- easy to operate;
- robust construction;
- quick and easy cleaning;
- perfectly trained birds.





Air quality is important to your hens' health

We believe that the health and thus performance of hens first and foremost depends on the quality of the environment they live in. A healthy climate is created by controlling the air flow inside the house and providing fresh air at bird level and removing contaminants such as moisture, ammonia and carbon dioxide. This is also a specialism of the Vencomatic Group.



ECO Unit

The ECO Unit creates an optimal control for the climate in poultry houses in all weather conditions with minimal energy use and superior air quality. In cold conditions, the ECO Unit is a heat exchanger that uses warm air from inside the house to heat up fresh air from outside. In warm conditions, water can be sprayed within the unit on the outgoing air, which causes evaporative cooling of the outgoing air. This also causes the incoming air to cool considerably without an increase in absolute humidity. At the same time, the ECO Unit reduces emissions of ammonia and the fine dust emission is reduced with 80%.

With the ECO Unit you can fully control the minimum ventilation in your house. Via aeration tubes the ECO Unit brings fresh preheated air at bird level. The preheated air is distributed directly under the bird and onto the manure belt. This leads to:

- Optimal environment for birds and humans;
- Improved bird performance;

ECO Zero The Netherlands



Cleaning

Proper cleaning of heat exchangers remains a challenge. To make manual cleaning easier, all side panels of the ECO Unit can be removed very easily and the complete "heart of the unit" can be approached from all sides.

As an option, there is also an automatic cleaning system that can be used while the ECO Unit is in operation and there is no interruption of the ventilation process. The ECO Unit keeps its maximum thermal efficiency without dirt blocking the airflow and heat transfer.

ECO Zero

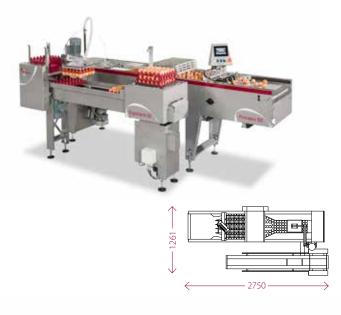
With the ECO Zero system, maximum ventilation is realized by ECO Units. The system guarantees full control of the climate under all outside conditions. It cools using indirect adiabatic cooling which works with two air flows: the humidified outgoing air and ingoing air to be cooled. The outgoing air is humidified and passed through the heat exchanger, where it releases its cold to the heat exchanger and is then discharged to the outside. In the unit, the incoming air (outside) air can absorb cold without becoming moisturized and then it cools the house.

ECO Zero is a very energy efficient system of heating, cooling and ventilation. The optimal climate results in strongly improved productivity of layers (lower mortality, extra eggs, lower FCR) and a fast pay-back.

Efficient and **gentle handling** of table eggs

Gentle handling of eggs is the core business of Prinzen for over 30 years. Prinzen started with setting machines for hatching eggs, which are renowned for their highly careful handling of eggs and unsurpassed points down setting. For the table egg market a special range of machines are designed with the keywords: simplicity, compactness and safety in mind. These machines combine careful handling with speed, making the collection of table eggs quick and easy at any size farm.

> Quick and easy collection of table eggs

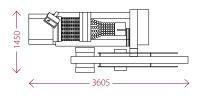




We used the extensive knowledge in hatching egg setting machines for the development of top of the line table egg packers for 30 cell plastic and cardboard trays. Semi-automatic packers to fully automated packing lines offer solutions fitting industry requirements. Prinzen packers are designed to provide the highest egg quality throughout the process. Various compact configurations fit into any egg collection room and provide optimal overview of the entire packing process.

All machines are made of stainless steel, together with the excellent service accessibility it makes cleaning quick and easy. Packers are available with a variety of capacities and can be extended with features such as infeed belts, egg coders, tray stackers and automatic pallet loaders.





| | Effective capacity | |
|-------------|--------------------|--|
| Prinzen 50 | 18,000 eggs/hour | |
| Prinzen 70 | 25,200 eggs/hour | |
| Prinzen 100 | 36,000 eggs/hour | |
| Speedpack | 40,000 eggs/hour | |

olegg Terrace

France

Tray stacker

To further automate the process of egg packing, trays can be stacked with our semi- and fully automatic stackers.

PS4 Tray stacker

- Fully automatic;
- Capacities up to 40,000 eggs per hour;
- Uniform stacks of six trays;
- Fits any configuration.

Ergostack

- Semi-automatic stacker
- Uniform stacks of six trays
- Option: stack outfeed unit
- Fully integrated in the Prinzen 50 and 70 packers

Egg coder

Egg coding systems are available for all our packers. We offer two high quality methods for coding individual eggs at minimal costs.

NERASSAR MANYING DAMANANA

Ovoprint

- Inkjet technology;
- Print head adapting to each individual egg height;
- Print field: max. height 4.2 mm / length 25 mm;
- Over 200,000 eggs per ink cartridge, text size depending.

Ovostamp

- Gentle code stamping using a flexible rubber head;
- Stamp size of Ø 17mm which fits maximum 3 lines with 17 characters;
- Over 250,000 eggs per stamp.

Compact Packing Module (CPM)

Facilitating automated egg packing in small carton boxes of 10 or 12 eggs can easily be done by extending the Prinzen 70 with the Compact Packing Module (CPM) *with optional box closer*. For additional weighing and sorting requirements the Prinzen Ovograder can be added.



Ergostack 50



Meggsius Select

23

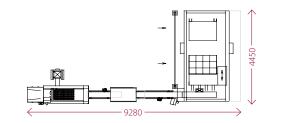
The Meggsius Select is a system for automated selection of second grade consumption eggs using machine vision and sorting technique. Eggs can be sorted based on exterior characteristics to four destinations/exits. Every individual egg will be inspected on exterior indicators like quality and dimensions. The system ensures an objective and reliable quality assessment. This greatly reduces the daily workload. In addition to monitoring the process, the operator only takes care of the supply of packaging material and the removal of full packs such as pallets and trays with rejected eggs. Egg quality, reject category data (per hen house and/or day totals) is transparent and accessible for further analysis.

Speedpack 110

The Speedpack 110 automatic egg packer handles and packs eggs quickly yet carefully on 30 cell trays. As expected from it's name, this table egg packer is named after it's speed: 40,000 eggs per hour. Due to the compact design of the machine, you will especially appreciate the complete overview of the entire egg packing process. It allows you to spend more time on checking the quality of the eggs.

The Speedpack 110 provides you the highest capacity per square meter of available footprint in the market. Prinzen's machines are built with high quality materials to ensure a long lifetime. Moreover the Speedpack 110 is an interesting investment related to the low cost of operation and maintenance.

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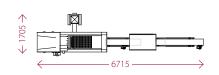
Speedpack 220

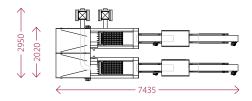
To meet the demand for higher capacities Prinzen offers the Speedpack 220. It reaches the capacity of 80,000 eggs per hour. Several machine configurations are available to match the space in the egg room. In addition automatic supply of 30 cell trays to the packers is available for both denester units. The high level of automation and reliability set the right conditions for a perfect packaging job.

- Compact design and modularity of the individual units;
- Best ratio available in the market: capacity versus required footprint;
- Ensures maximum processing capacity.



| | Effective capacity | Installed power | Machine footprint |
|---------------|--------------------|-----------------|--------------------------|
| Speedpack 110 | 40,000 eggs / hour | 1.6 kVA | L x W = 6,715 x 1,705 mm |
| Speedpack 220 | 80,000 eggs / hour | 3.2 KVA | L x W = 7,435 x 2,950 mm |

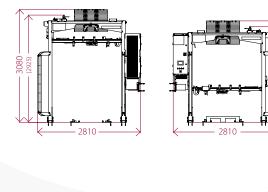




Palletiser 110

The Palletiser 110 greatly reduces the tiring work of handling stacks of trays and pleasantly improves your daily egg collecting work. he capacity and functionality of the automatic palletiser perfectly matches the packing capacity of the Prinzen packer range starting from 25,200 (Prinzen 70) up to 39,600 (Speedpack 110). It can handle 40,000 eggs per hour on pallets,

by lifting 4 stacks of trays in each movement. The palletiser operates independent and connects with any suitable type of farm packer. The frame design is compact and matches various egg room lay-outs and uses very little floor space.



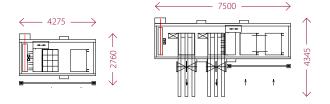


Pallet Loader

The Pallet Loader completes the egg collecting process, increasing automation even further. The Pallet Loader is fully compatible with the capacity of the Prinzen packing machines. The Pallet Loader is a gantry robot offering safe and high precision of handling.

- Reduce heavy and repetitive manual labour;
- Modular & compact design: fits any egg room.

By combining the Speedpack, PS4 Tray stacker and Pallet Loader, Prinzen created a complete packing line with an unequalled speed of 4 egg pallets per hour.





Increase the value per egg

Ovograder

The Ovograder is an electronic egg grader for on-farm pre-selecting of table eggs. Grading eggs in specific weight ranges increases uniformity and thus the value per egg. Its capacity of 30,000 eggs per hour ensures perfect inline operating with high capacity egg packing machines. The Ovograder can be configured with the Prinzen 100 or the Speedpack and one or two additional packing machines. This way predefined table egg sizes are automatically collected on 30-cell trays.

| | ← 782 → |
|---|----------|
| < | k 1600 → |

| Effective capacity | 30,000 eggs / hour |
|--------------------|----------------------------|
| Installed power | 0.5 kVA |
| Air requirement | 100 N ltr / minute / 8 bar |





Venco Campus Home of Poultry Innovation

What suits a team of poultry people better than an egg shaped building? We are accommodated in one of world's most sustainable buildings: the Venco Campus. This building reflects our mission of being the number one global player for sustainable, poultry friendly systems.

The Venco Campus serves as an international knowledge and innovation centre for the poultry industry. We strongly believe in open innovation through thinking ahead with poultry people. Your experience is of great value to us and we invite you to come and explore what poultry innovation can offer you. **Together we bring the poultry sector to the next level.**



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