

Egg Grading

GraderPro 400-800

Prepare to change your perception of egg grading.





65 Years of Egg Grading Experience in One Line

Our egg graders handle all popular packaging throughout the world. We offer a wide range of mechanical and electronic graders that are flexible to be configured to local needs of producers starting at 75 cases/hour.

Choosing an egg grader from SANOVO TECHNOLOGY GROUP, you get gentle handling of your eggs to each carton through the most advanced technology available, with superior labour efficiency, and lowest spare parts usage.

The SANOVO graders have the ability to track your eggs individually for adding value to your partners and consumers down the value chain. The design of the machine ensures that all the necessary parts are completely washable and FCM-approved (declaration of compliance with government food safety legislations).

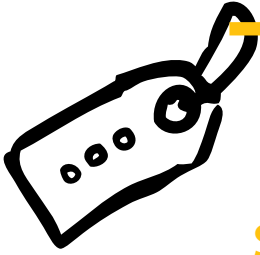
Smart and intelligent design for every grading business.

GRADERPRO	400	600	800
Maximum capacity	144,000 eggs/hour 400 cases/hour	216,000 eggs/hour 600 cases/hour	288,000 eggs/hour 800 cases/hour
Offline loader	OptiLoader Plus 12+	OptiLoader Plus 18+	OptiLoader Plus 18+
Infeed rows	12	18	2x12
Main tracks	4	6	6
Lanes	16-32	16-32	16-32
Single egg traceability	Yes	Yes	Yes
Order based grading	Yes	Yes	Yes
Integrated egg printing	Top+Side	Top+Side	Top+Side
Integrated pack printing	Yes	Yes	Yes
Infeed			
Wash-down	●	●	●
Single-Brush Cleaning	○	○	○
Triple-Brush Cleaning	○	○	○
UVC	○	○	○
CIP	○	○	○
Transporter			
Wash-down	●	●	●
UVC	○	○	○
CIP	○	○	○
Removal gates, scales, crack detection			
Wash-down	●	●	●
UVC	○	○	○
CIP	○	○	○
Inserter			
Wash-down	●	●	●
Main Track			
CIP	○	○	○
Packers & lanes			
Wash-down	○	○	○

● Standard
○ Optional



The SANOVO GraderPro will ensure you the highest capacity in the industry by handling up to 800 cases/hour and the most gentle egg handling of every single egg. Minimal maintenance, cleaning and downtime are always on track.



SANOVO Vision AI

Every Egg Has a Tag

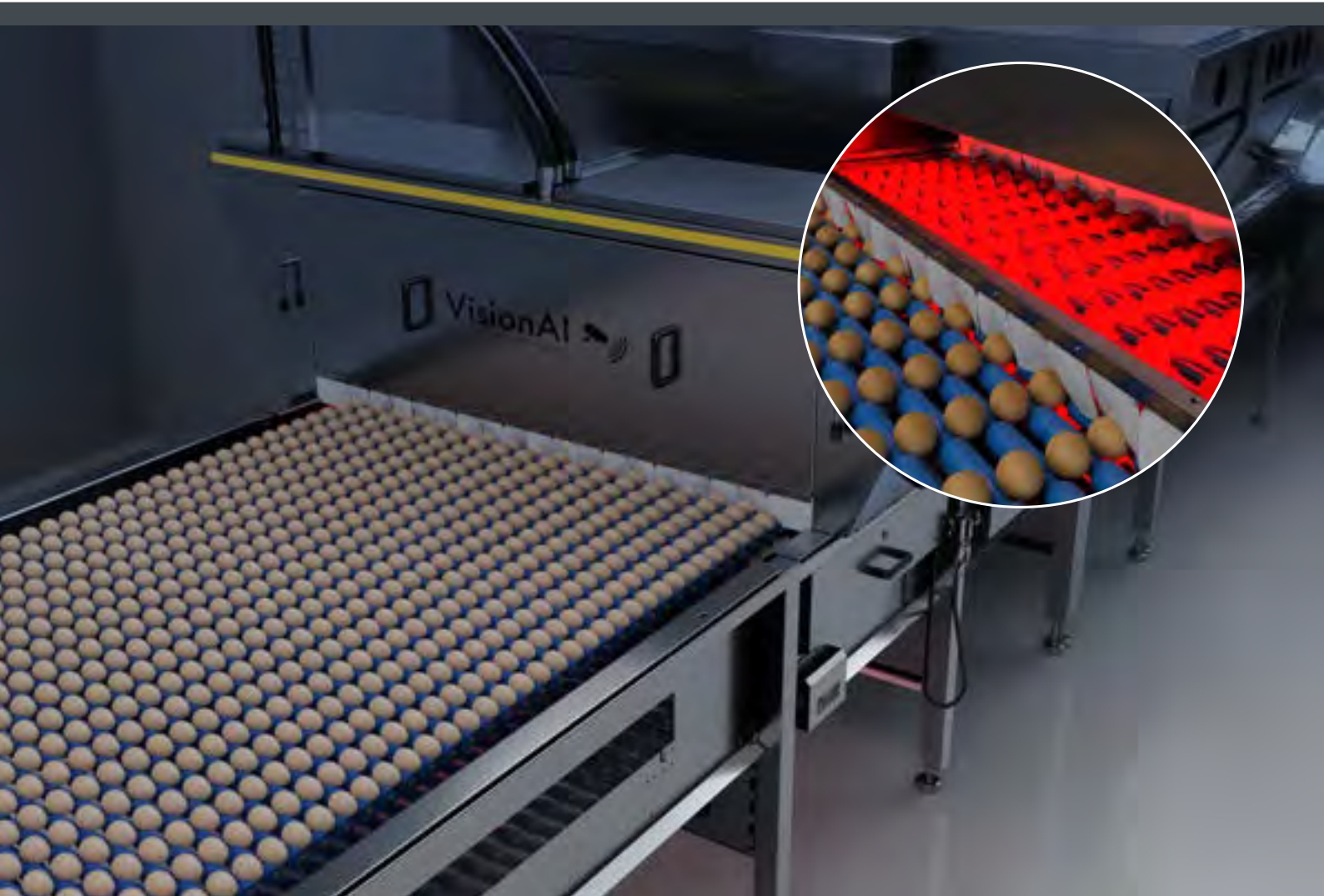
Today, food safety is an increasing demand and cannot be ignored. Traceability of the eggs is of high importance for food safety.

The GraderPro offers **100% traceability** through the entire machine, which means that **every single egg is individually controlled** and can be traced back if necessary.

From the first detection system in the grader, the software tracks every single egg until packed in the carton, case or pallet. Egg tracing enables you to track your eggs back to where they come from.

With the addition of the Vision AI crack detection system, the SANOVO OptiGrader and GraderPro make yet another leap in efficiency and quality assurance.





- Detect cracks in your eggs without touching them
- Eliminate cross-contamination
- 100% traceability
- High food safety

Designed for Gentle Egg Grading

In the egg handling and processing industry, we have gained the reputation of producing solutions of the highest quality and performance.

We are truly excited to offer you this great machine and feel confident that it will serve you as a trusted partner in your egg grading business, ensuring food safety and state-of-the-art technology.



EXCEPTIONAL GENTLE EGG HANDLING

The SANOVO GraderPro is developed to give your eggs first-class treatment. One of the innovations developed for the GraderPro is a new system that ensures the gentlest egg handling ever seen.

Most damaged eggs are cracked, due to side impact on the eggs. Side impact occurs when you transfer eggs through a machine in one direction, and while the egg is in movement, there are changes to the direction. To avoid this side impact, we developed a system that only transfers the eggs in one direction at a time. We deliver eggs only one way – downwards. The downward delivery eliminates side impact and ensures exceptional gentle egg handling.



UNIQUE ZONE GRADING

The GraderPro can grade the eggs of an infeed zone, completely independent from the others. This means that different weight classes can be created per zone and eggs from each zone can be routed to a specific product or lane. This allows a maximum efficiency and customisation of your grading facility.



Watch
movie



EASY MAINTENANCE

We made an effort into making a basic design that requires minimal maintenance. Due to less moving or complex parts, the required maintenance can be kept at a low level.

The minimal service required on the machine saves you downtime and money.

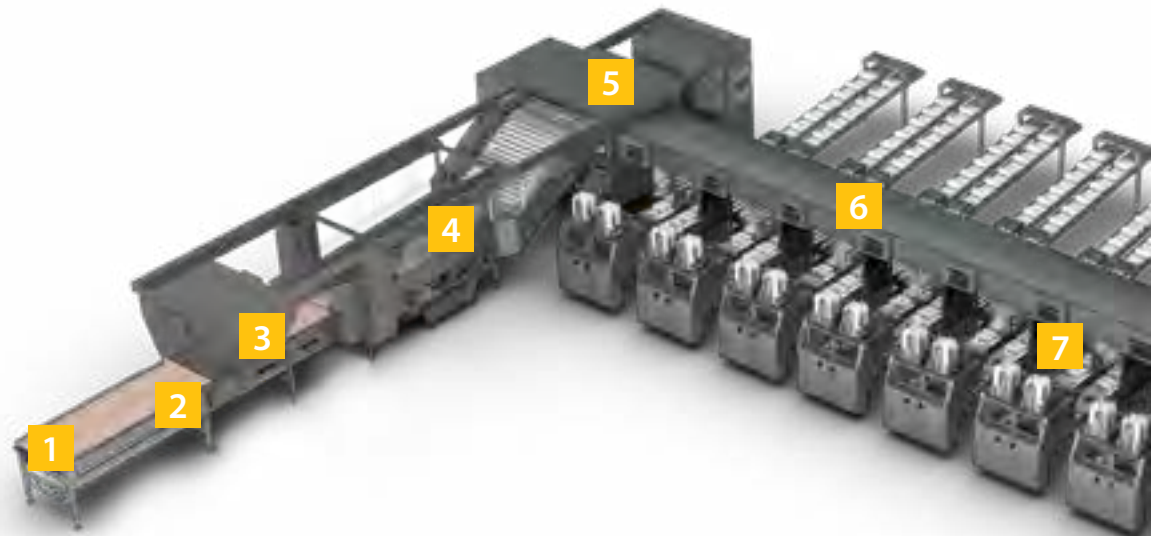


AUTOMATIC CLEANING

Cleanability of the machine is very important when investing in a new egg grader. The SANOVO GraderPro has been designed for optimal cleaning with minimal effort, and can be equipped with CIP (cleaning in place).

We made a hygienic design by making sure that all parts of the machine can be cleaned, leaving no blind spots. No need to disassembling the machine for cleaning. In addition to time and manpower savings, CIP reduces the amount of water needed for cleaning, minimizing your production costs.

GraderPro 400



1 Infeed

Machine can be configured for offline / Inline grading. Completely washable.

2 Accumulator

Completely washable. Min. 4 lanes
Max. 8 lanes Programmable end release.

3 Candling booth

Equipped with a standard manual candling booth.

4 Weighing

Self-calibrating scales for optimal weighing of every egg.

5 Orientator

Sliding inserter 1x6 eggs. No wear and tear.
Completely washable.

6 Maintrack

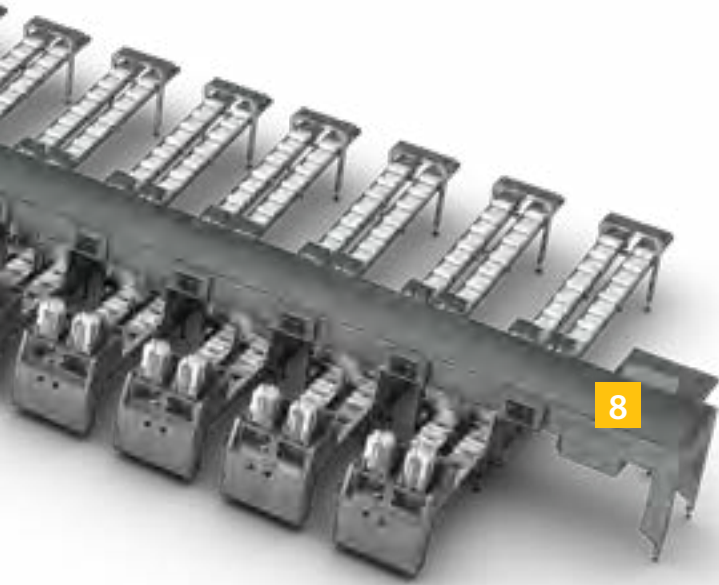
Single track machine.

7 Packers/Cascade

The cascades with one directional transfer and a high buffer capacity are responsible for gentle egg transfer to final setter position and support the design goal of "every egg has a tag".

8 End release (non-stop)

The end release of the machine frame makes it possible to run the GraderPro at full speed even if the packing lanes are full. The end release is also suitable to drop two more weight categories.



144,000 eggs/hour
(400 cases/hour)



Open layout



Play video



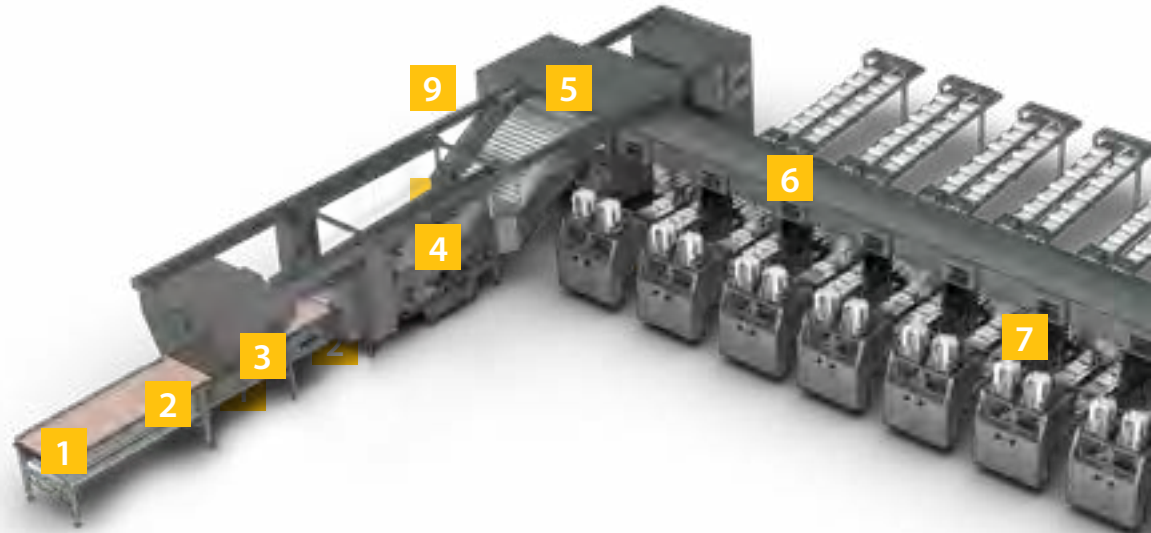
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TECHNICAL DATA

Max capacity	400 cases/hour (27,000 eggs/hour)
Rows infeed	12 rows
Amount of tracks	4 tracks
Minimum no. of lanes	16
Maximum no. of lanes	32
Egg inspection	Candling/Automatic
End release + 2 manual grades	Yes
Inline	Yes
Offline	Yes
Combi	Yes
Information display	Yes
Automatic lubrication	Yes
Integrated egg printing	Top + Side
Integrated pack printing	Yes



GraderPro 600



1 Infeed

Advanced infeed machine can be configured for offline / inline grading. In case of offline the machine, will be equipped with a FlexLoader. Completely washable.

2 Accumulator

Alpha/Opti Accumulator.

3 Candling/Automatic detection

Equipped with candling booth or full leaker, in-line, crack, blood and color detection system.

4 Crack & Weighing

Self-calibrating scales for optimal weighing of every egg. Completely washable.

5 Orientator

Sliding inserter 1x6 eggs. No crack detection, no side exit, no optional belt.

6 Maintrack

Single track machine.

7 Packers/Cascade

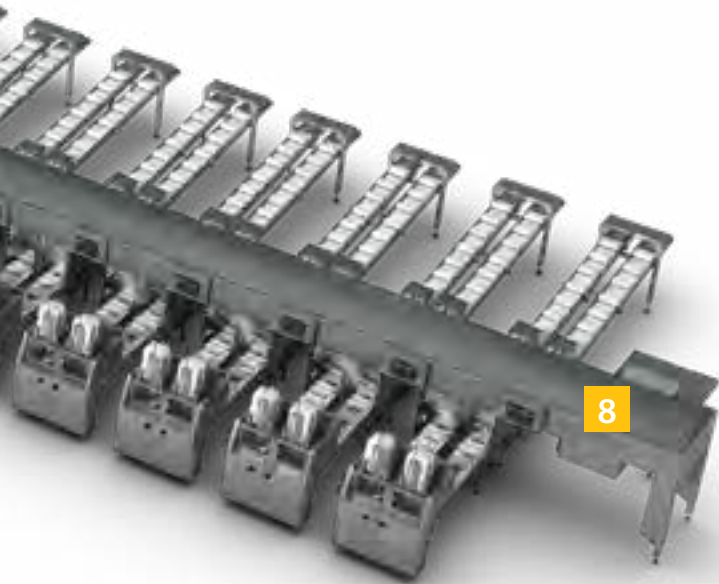
The cascades with one directional transfer and a high buffer capacity are responsible for gentle egg transfer to final setter position and support the design goal of "every egg has a tag".

8 End release (non-stop)

The end release of the machine frame makes it possible to run the GraderPro at full speed even if the packing lanes are full. The end release is also suitable to drop two more weight categories.

9 CIP

Cleaning In Place, covers the infeed table, outlets, weighing scales, crack modules, orientator, and the main track.



216,000 eggs/hour
(600 cases/hour)



Open layout



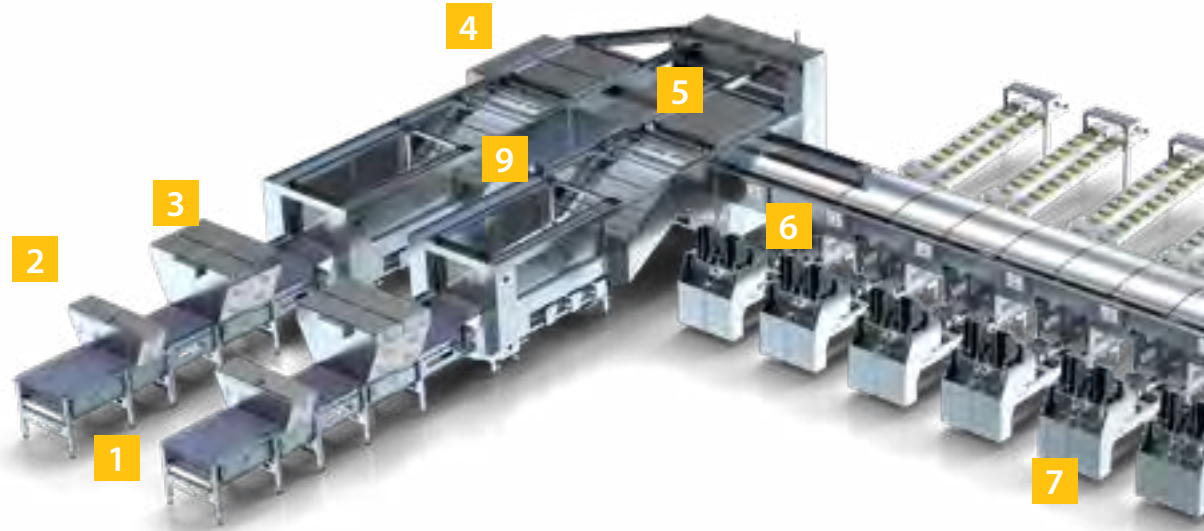
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TECHNICAL DATA

Max capacity	600 cases/hour (216,000 eggs/hour)
Rows infeed	18 rows
Amount of tracks	6 tracks
Minimum no. of lanes	16
Maximum no. of lanes	32
Egg inspection	Automatic
End release + 2 manual grades	Yes
Inline	Yes
Offline	Yes
Combi	Yes
Information display	Yes
Automatic lubrication	Yes
Integrated egg printing	Top + Side
Integrated pack printing	Yes



GraderPro 800



1 Double Infeed

Advanced double infeed machine can be configured for offline and/or inline grading. In case of offline the machine, will be equipped with a OptiLoader.

2 VisionAI Crack Detector.

The VisionAI Crack Detector is a contactless, low-maintenance, highly accurate crack detection module based on vision technology for grading centers

3 Automatic detection

Equipped with leaker, dirt, blood and color detection system.

4 Crack & Weighing

Self-calibrating scales for optimal weighing of every egg. CIP.

5 Orientator

Sliding inserter 2x8 eggs. No crack detection, no side exit, no optional belt.

6 Maintrack

8 track machine.

7 Packers/Cascade

The cascades with one directional transfer and a high buffer capacity are responsible for gentle egg transfer to final setter position and support the design goal of "every egg has a tag".

8 End release (non-stop)

The end release of the machine frame makes it possible to run the GraderPro at full speed even if the packing lanes are full. The end release is also suitable to drop two more weight categories.

9 CIP

Cleaning In Place, covers the infeed table, outlets, weighing scales, crack modules, orientator, and the main track.



8

288,000 eggs/hour
(800 cases/hour)



Open layout



Go to website

TECHNICAL DATA

Max capacity	800 cases/hour (288,000 eggs/hour)
Rows infeed	2x12 rows
Amount of tracks	8 tracks
Minimum no. of lanes	16
Maximum no. of lanes	32
Egg inspection	Automatic
End release + 2 manual grades	Yes
Inline	Yes
Offline	Yes
Combi	Yes
Information display	Yes
Automatic lubrication	Yes
Integrated egg printing	Top + Side
Integrated pack printing	Yes

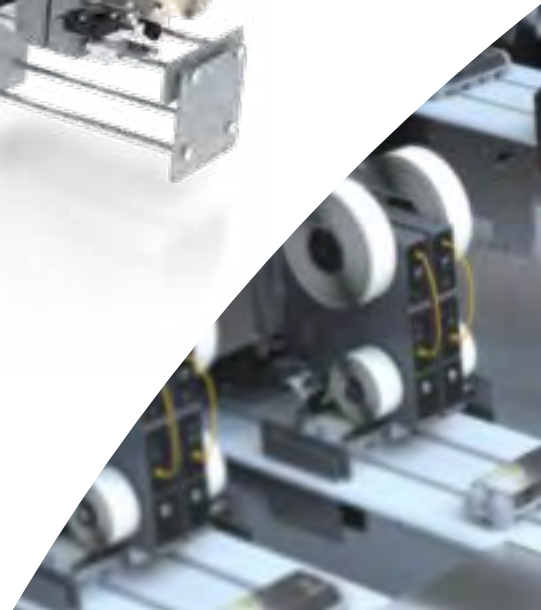


SANOVO Pack Labeler

Simplifying Labeling, Enhancing Traceability

The SANOVO Pack Labeler is here for reliable, consistent egg pack labeling. This practical feature for our full grading series not only makes labeling easier but also enhances traceability, providing vital information like the laying date, grade, and origin of eggs right on the pack.

- **Avoid mislabeling:** By providing clear, accurate labeling, the Pack Labeler helps reduce the risk of mislabeling, making product recalls less likely.
- **All-In-One Solution:** With the Pack Labeler from SANOVO you reduce the number of equipment suppliers in your plant.
- **Easy Integration:** Fits well with all SANOVO grading machines, and the upgrade to our reliable labeling technology is straightforward.



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With the SANOVO Pack Labeler, accurate labeling and enhanced traceability come hand in hand, making your egg packing operation more reliable and consumer-friendly.



SANOVO LinkPro

Get more insight from your egg production data



KEEP YOUR BUSINESS AT THE CUTTING EDGE

During production, the SANOVO equipment will provide valuable operational information that, thanks to LinkPro, will be accessible at any moment just with an internet connection. Therefore, you will be able to monitor KPI's and store process data for evaluation.

This information provides important management information, valuable production overviews and it is helpful to further optimize production; for example, the risk of downtime is reduced through the early detection of need for scheduled or ad-hoc service.

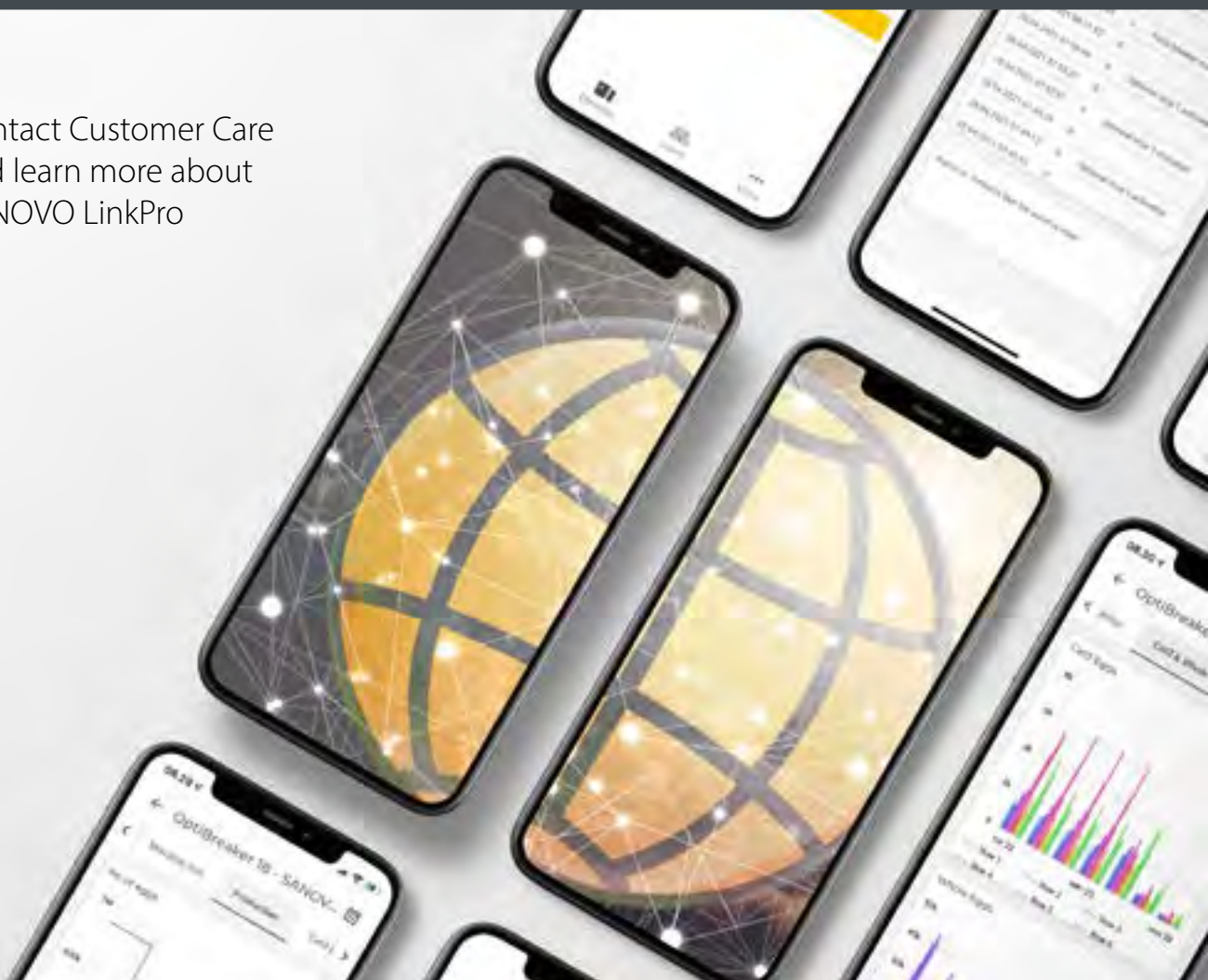
Software features for the GraderPro 400-800

	400	600	800
Batch Reports	●	●	●
Upgrading Rehabilitation (Crack, Dirt)	●	●	●
Seperate zone sorting (infeed)	○	○	○
Seperate weight limits	○	○	○
Dynamic weight limits	○	○	○
Color grading (optional to dirt detection)	○	○	○
Capacity control	○	○	○
Egg it Switch	○	○	○
Egg-it Trace	○	○	○
Integrated egg printing	○	○	○
Product-based grading (GraderPro unique)	○	○	○
Order-based grading (GraderPro unique)	○	○	○
Real-time pack labeling (GraderPro unique)	○	○	○

● Standard
○ Optional



Contact Customer Care
and learn more about
SANOVO LinkPro



Easy to learn and use



Enables real-time decision making



Minimal IT support required



Data protection*

*We protect your data in the Cloud against potential vulnerabilities and ensure confidentiality, integrity, and availability of your data. Data is treated according to ISO-27001 (Information security management).

The entire SANOVO Grading Family

The graders are all the result of many years of continuous development and have proven their efficiency at many production sites. Each family has been optimized to meet the requirements in their particular working environment.

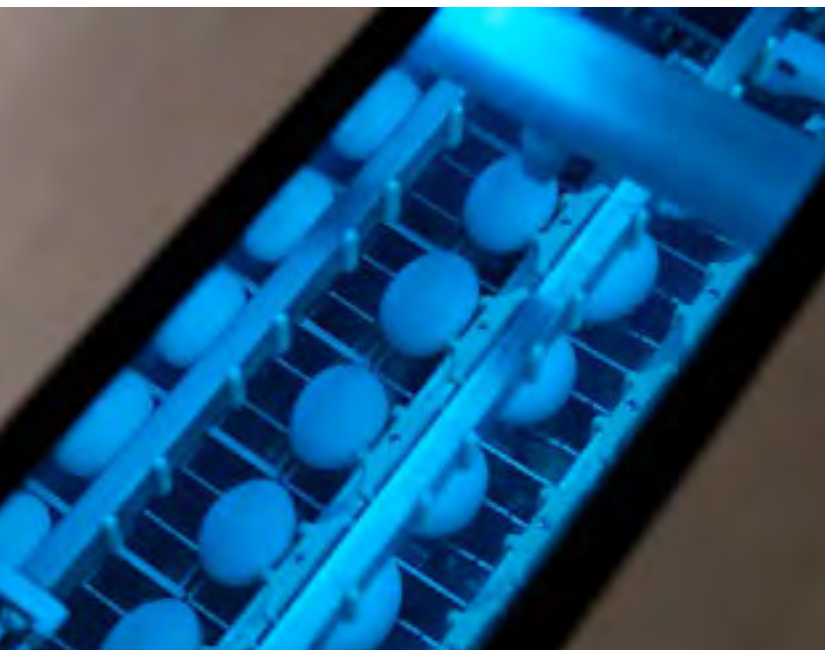


Learn more about
our grader range



More output
with higher
egg quality

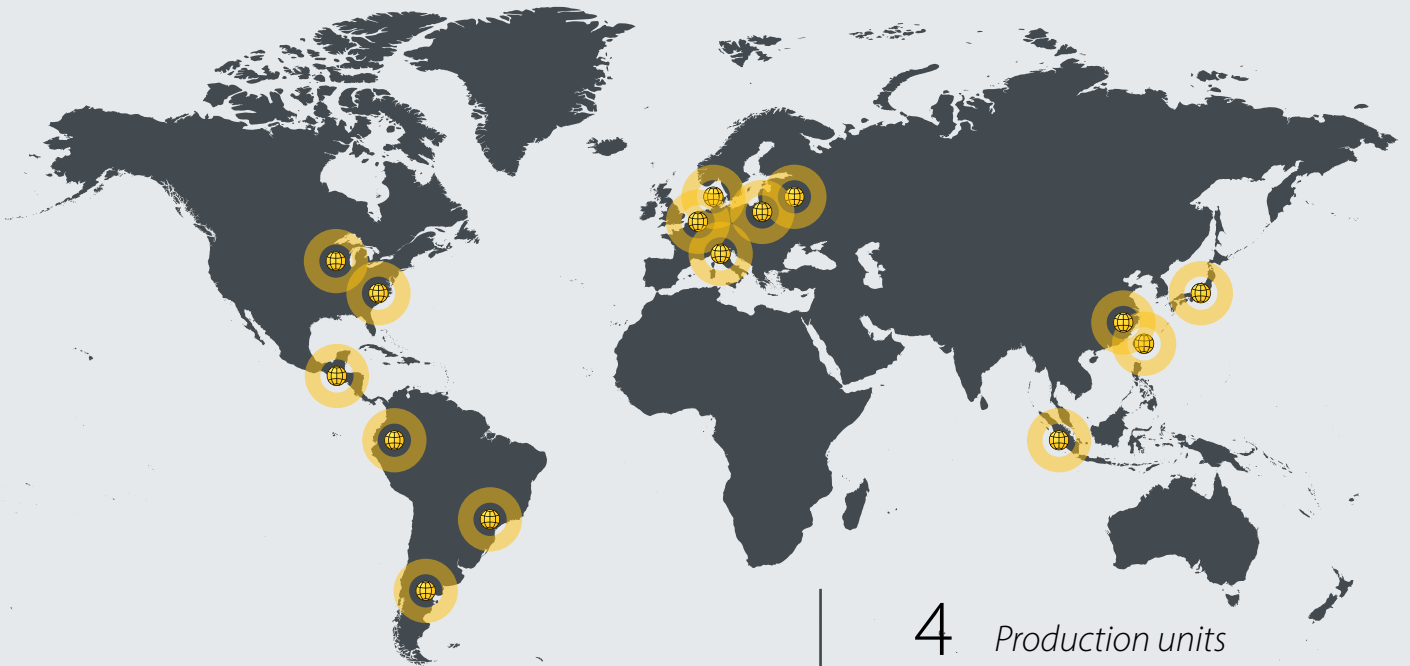
	Alpha 70, 100, 125	Ardenta 170, 300	OptiGrader 400, 450, 600, 707	GraderPro 75, 110, 150, 220, 400, 600, 800
Capacity	25,200 - 45,000 eggs/hour (70-125 cases/hour)	61,200 -108,000 eggs/hour (170 - 300 cases/hour)	144,000-254,600 eggs/hour (400-707 cases/hour)	27,000-288,000 eggs/hour (75-800 cases/hour)
Tracks	1	2	4	1/2/4/6/8
General Description	For egg producers who need a robust, reliable, hygienic egg grading machine at an economic price.	Higher capacity than the Alpha in tough production environments.	Setting higher standards in food safety, egg quality, cleanability, sanitation, and performance. For advanced egg grading.	High-end next-generation egg grader, based on state-of-the-art egg grading technology. Full efficiency, highest food safety standards, maximum hygienic design. "Every egg has a tag"
Flexibility	All grader designs are optimized to fit into every production environment. Their modular setup and the various packing lane configuration options ensure that producers get out the most of their available space.			
Gentle Egg Handling	Our design avoids risky movements and fragile components. The overhead conveyor system that gently lifts eggs into their carriers. Simple yet effective, minimizing the risk of hairline cracks. Soft brush receivers ensure the gentlest egg transfers in the industry.			Same gentle egg handling features as in previous models, but with individual cup receivers in cascade system instead of brushes for individual egg tracking
Traceability	EggIt Switch, infeed and unique zone grading, advanced supplier reporting for accurate supplier batch tracking			EggIt Switch, infeed and unique zone grading, individual egg packing, advanced supplier reporting for accurate individual egg tracking



Worldwide service & support anywhere at anytime



Our team of specialists is here to help if you have any trouble with your equipment, need technical support, ordering spare parts, training of your local staff or if you need an upgrade or maintenance of your machine.



4 *Production units*
15 *Sales & service offices*
+50 *Distributors*



SANOVO CARE

Our contracts make it easier for you to choose a service that fits your needs

We believe that no matter how similar two facilities are, their maintenance needs are never the same.

This is why we specialize in customized SANOVOCare Agreements, which are designed specifically to maximize the return of your investment while minimizing your risks and break downs.

TRAINING PROGRAMS

It is our experience that a well-trained staff is more capable of performing essential and correct daily maintenance which minimizes downtime and ensures that the equipment operates smoothly.

We offer a balance between theory and practice in our state-of-the-art training facilities that are fully equipped with operating machines.

SPARE PARTS

We stock more than 10,000 parts, and our intelligent, global storage and logistics system makes it possible to operate with short delivery times.

Original spare parts from SANOVO have the advantage of fitting quickly and easily. They have a long service life and can be supplied many years after the machine was first purchased.



Learn more about customer care

TECHNICAL SUPPORT

In Technical Support we have invested in digital technologies to facilitate more effective communication and interaction - all to keep our equipment running and up-to-date every day all year. With Microsoft Hololense we are ready to assist you on the spot.

AFTERSALES

Keep your existing equipment up-to-date with our aftersales.

Upgrading, remodeling of your existing equipment or integration of new installations - we are here to assist you.



**Go to www.sanovoegg.com
to learn more on each grader**

SANOVO 
TECHNOLOGY GROUP

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 **THORNICO**
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