

Turning **eggs** into valuable business

**SANOVO Alpha**

Performance you can  
depend on

# Alpha

Performance you can depend on

The Alpha is a robust and reliable egg grading and packing system designed for egg producers that require a no-nonsense piece of equipment with all the hygienic features currently available on the market.

Modular in its construction and suitable for the medium size capacity range, the Alpha is ready for the future; offering our customers the needed flexibility for today's markets.

**SANOVO**   
TECHNOLOGY GROUP



## Robust and reliable egg grading and packing for your business

The flexibility of the Alpha allows the graders to be equipped with an accumulator or a FlexLoader in order to create in-line or off-line egg grader. Also combinations of accumulator and FlexLoader are possible, even upgrading your Alpha from a 70 to a 100 or 125 model is possible.

### Roller cleaning system

The roller cleaning system can be integrated in the roller entry conveyor so that it cleans every roller while the grader is running. During operation, three brushes maintain a sweeping action across the rollers, reducing bacterial growth on the rollers.



### Candling booth with IRUS quality system

In situations in which automatic quality control systems are not in use, a candling booth can be used for quality control. The candling booth allows the operator to check the passing flow of eggs quickly and accurately. A Semi-Automatic Candling System (IRUS) can be added that can classify four categories of off-grade eggs. These eggs will go to a designated exit lane or dropgate.



### Infeed

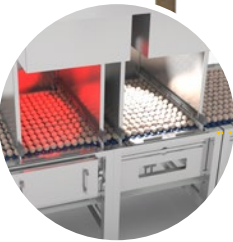
The SANOVO Alpha can be configured to operate inline with eggs coming directly from the layer houses or offline with trays of eggs loaded by the SANOVO OptiLoader.



The materials comply with the food safe contact material standard. The whole infeed can be foamed and washed down including the weighing and crack systems.

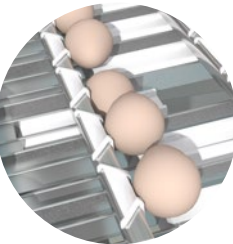
### Leak and dirt detection

The integrated UVC system reduces possible surface contamination during weighing and packing. Detachable water-cleanable entry and exit guards ensure that no UV-C light escapes the system, ensuring safety for operators.



### Removal gates

The Alpha is equipped with one drop gate to remove rejected eggs to prevent polluting the machine and keeping the machine in the best possible working order.



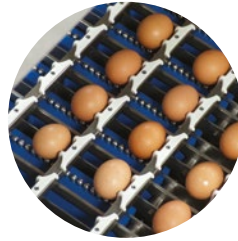
### Weighing

The well proven digital weighing system constantly recalibrates for each egg, ensuring the most accurate weighing accuracy. The whole system is mounted for maximum stability without moving parts, thus, minimal wear and maintenance. The scales can be cleaned without difficulty.



### Crack detection

This advanced washdown crack detection of SANOVO has the sensitivity to determine multiple crack categories giving the possibility to carefully fine tune your final product to maximum and constant output.



### Blood detection

Placed at the beginning of the main track, it is very accessible and easy to clean, a zero measurement is taken to compensate for outside light and the individual color of the egg.



### Denester

Each denester is detachable and easily movable. Extra denesters can be added to minimize changeover downtime, reducing labor cost and serving as backup units that can be operational in minutes.



### Egg-it Touch

The user-friendly control system, enables you to control the complete grader.



### Printers

SANOVO provides for fully interfaced printers from renowned manufacturers so your final product is coded according to local standards. Printer setups are provided as turn-key solution.



### Packers

The packers have a high buffer capacity which minimizes operational stops of the packing lanes or the grader.



### Monitors / touch screens

Large overhead monitors give instant information for operators to react upon to maximize operational production.



### Over-undergrade belt

The Alpha can send any egg weight or second quality egg out of the grader without having to insert them into the carrier chain. This creates an extra packing location without adding machine's footprint.





# Functionality tailored to fit your need



## State of Art Technology

The Alpha can detect leak, dirt, blood eggs and hair cracked eggs with ever increasing accuracy on every detection unit. As Operator, you can define your own levels of off-grades by which you can manage the required quality. The additional functionality of color grading enables your grader to sort based on the color or shade of the incoming eggs.



## Color Grading

In combination with the dirt detector, color grading can be used to handle brown and white eggs separately. Brown eggs even can be divided into different shades. This allows you to create a product with more homogeneous colored eggs to fulfill customer demand even better. Eggs with undesired color can be isolated.



## Faster and Easier Cleaning

The SANOVO Alpha features a long list of design optimizations that significantly reduce cleaning time. Traditionally, cleaning of the infeed section was a manual process using wet cloths, scrapers and compressed air. Today, most of the manual work has been eliminated or dramatically reduced – depending on the grader family.

The crack detection and the weigh scales can simply be washed, no disassembly required, reducing the risk of wrong re-assembly, of production disturbances and most importantly, reducing cleaning time.



## Supplier Reporting

Supplier batch reporting guarantees the best products for your customer by providing information about each batch of eggs supplied to you. For each batch of eggs, the Supplier Batch Reporting reveals the weight classes, amount of dirt, leak, blood and cracked eggs. This information can be presented as a PDF document or exported to your own quality assurance system.



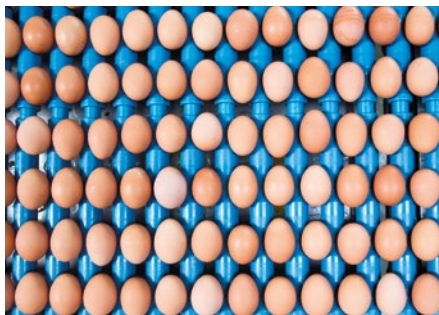
## Food Safety

With the ever-increasing global demand for improved food safety, SANOVO assists in helping your grader site to carry this responsibility. SANOVO graders are built based on regulations of food safe contact materials. The Alpha can supply all track and trace related data, to ensure a 100% safe product.



## Fully Interfaced with Printer

The Alpha can interface with all popular egg printer brands in order to offer a complete egg tracing solution. Egg prints can be selected individually for each product and a number of data sources can be used to print on the egg.



## Flexible Configuration

The modular and flexible design gives you the possibility to set up and configure the packing lanes in ways to match the desired logistic flow. Straight forward or reversed configuration are possible. The design reduces the overall machine footprint and maximizes the packer's flexibility and output. The overall low design of the Alpha allows all the machine operators to see each other maximizing communication, efficiency and minimizing labor requirements.



## Efficiency Reporting

In order to maximize your results, the grader must run at its maximum efficiency. In a daily operation there are numerous factors that influence efficiency, which need to be kept under tight control. With the Alpha's efficiency reports it is possible to know the exact efficiency of your grader and to pinpoint steps in the grading process that can be optimized.



## Easy to Maintain and Service

The graders are designed with many standard parts that are often locally available at our distributors or partners: reducing your operational costs and potential downtime. Need a hand changing a setting or making an adjustment? Our global service network is always available by phone, Skype or email.

With remote diagnostics, our customer care team can assist in addressing points of attention. This ensures fast and accurate resolutions for maximum production time.



## Easy to Operate

The graders are equipped with the EGG-it Touch program, which allows the operator to monitor the entire operation and make alterations when needed. The program continuously returns statistics on efficiency and performance and it includes a diagnostic feature in case of a malfunction. The EGG-it Touch program is a valuable source of information for everybody at the facility – from owner to operator to service engineer. The graders can also be monitored and diagnosed remotely by our customer care team.



## Rehabilitation

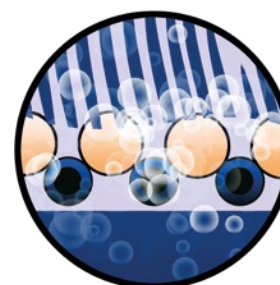
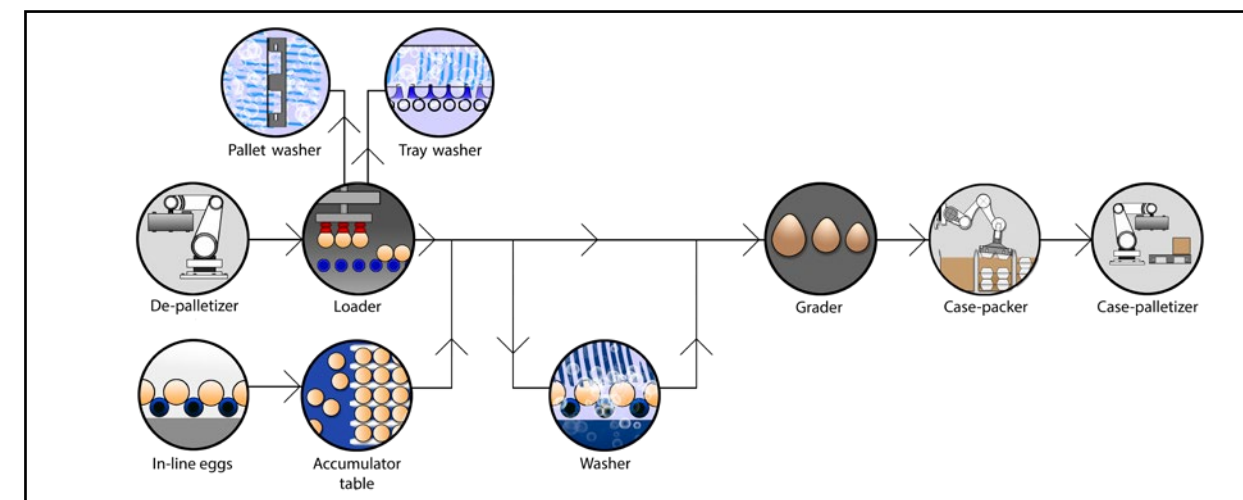
The SANOVO Alpha is by default equipped with functionality to maximize your output. Through smart technology, the operator has full control on the graded output quality. The grading process can be fine-tuned to deliver exactly the quality that is demanded by your customers.



## EGGit Switch

In order to trace every egg of a supplier batch to its final product, its origin must be known to the grader. With EGGitSwitch this can be done, without losing infeed efficiency. By placing a special 'egg' on the first tray of a new batch, the grader knows exactly to which batch every individual egg belongs while being able to continue with your grading operation seamlessly. EGGitSwitch is built on RFID technology.

# Functions in the grading process



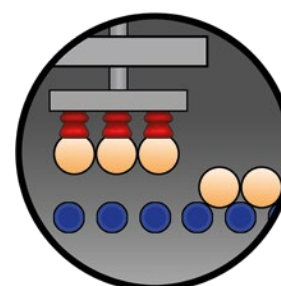
## Egg Washing

The challenge of egg washing is to clean the eggs efficiently without damaging them. The SANOVO SW washers fulfill this demand with a Double-Action Washing System with a combination of brushes and spray nozzles.

The modular washers are available in different lengths and wash times. They offer a variable number of brushes and spray modules for maximum washing performance.

The SANOVO SW Washers offer

- Removable brush & spray modules
- Slanted brushes for maximum egg-to-brush contact and gentle washing
- Adjustable brush system for different egg sizes
- Different brush types (soft or hard)



## Loading

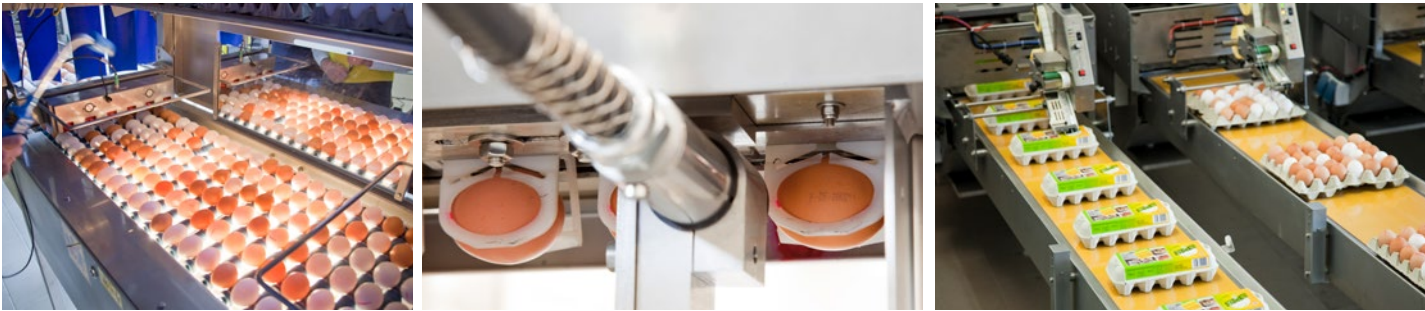
The SANOVO FlexLoader concept has been optimized for handling the 'daily' variance in of egg quality, tray size and shape. The SANOVO FlexLoader can handle from very small up to large eggs, without any loading complications. Furthermore the loader handles any type of tray available on the market.

Using proven technology, the SANOVO FlexLoader unique loader head ensures that eggs are gently lifted, spread and delivered onto the infeed roller table. The loader head is cleaned continuously by a blow-back system, and stuck eggs trays are automatically detected and sorted.



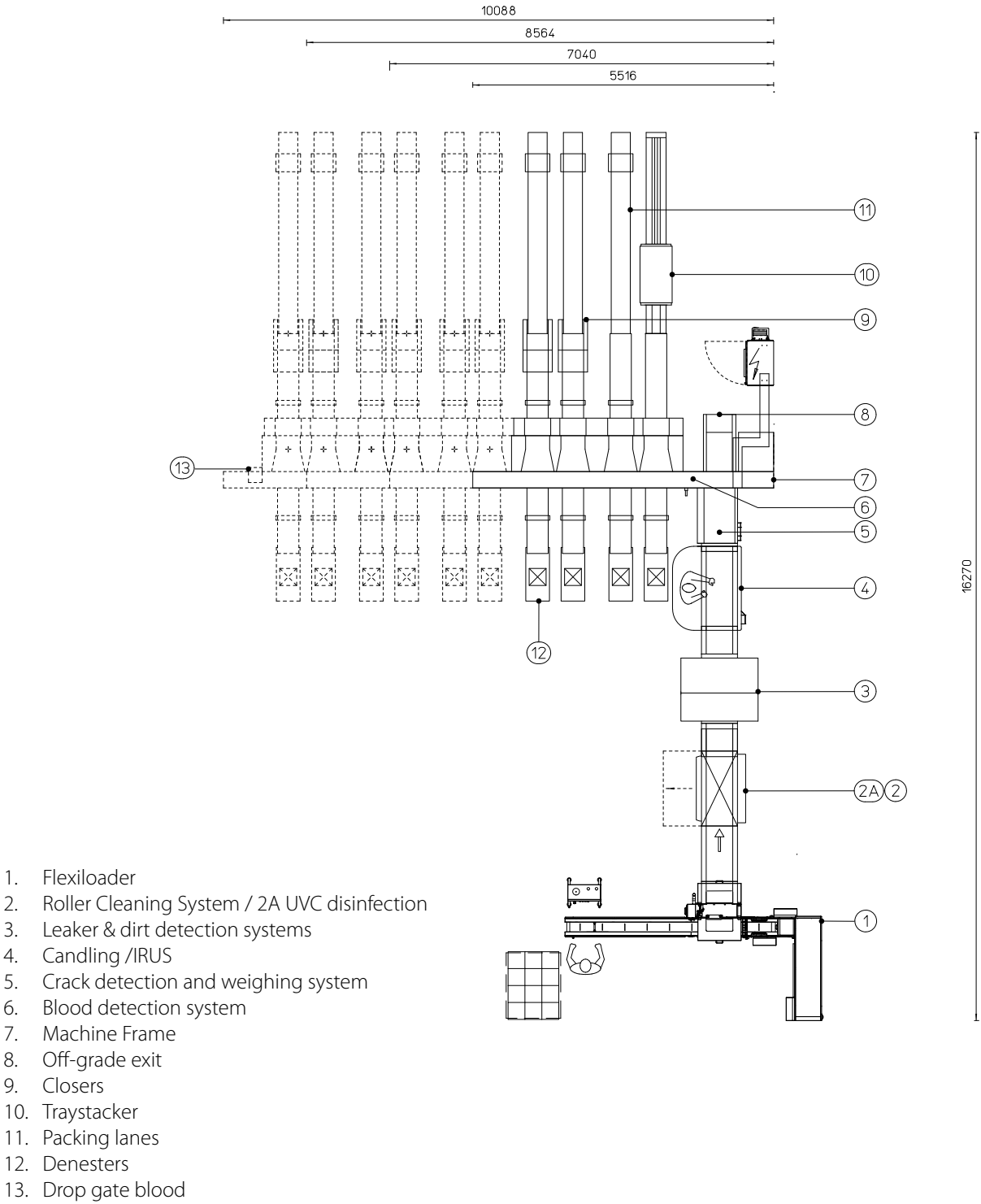
# Grader families optimized to your needs

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.



Technical drawing Alpha

	Alpha	Ardenta	OptiGrader	GraderPro
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)	144,000-288,000 eggs/hour (400-800 cases/hour)
Electronic weighing	✓	✓	✓	✓
Simple hygienic design	✓	✓	✓	✓
CIP	-	-	Semi-Automatic	Full-Automatic
Cleaning / Washing				
Infeed				
Removal gates	Wash-down	Wash-down	CIP (option)	CIP
Detection systems				
Scale	Wash-down	Wash-down	CIP (option)	CIP
Crack	Wash-down	Wash-down	CIP (option)	CIP
Inserter	-	-	Wash-down	CIP
Main track	-	-	-	CIP
Packers	-	-	Wash-down (option)	Wash-down
Packinglane	-	-	Wash-down (option)	Wash-down
Detachable conveyor belt	✓	✓	-	-
Minimum usage of specialized parts	✓	✓	✓	✓
Detection systems				
Scale	✓	✓	✓	✓
Crack	✓	✓	✓	✓
Leak	✓	✓	✓	✓
Dirt	✓	✓	✓	✓
Blood	✓	✓	✓	✓
Color	✓	✓	✓	✓
Inkjet printing	Side	Side	Side	Top + Side





# Service is your key to a better business

We take great pride in everything from supplying the smallest spare part to being a lifetime performance partner. Maximum uptime – high yield – improved product quality – all day – every day is the key to optimizing your business. Expertise from SANOVO Service will help you achieve this goal.

At SANOVO TECHNOLOGY GROUP, we know that your equipment is a critical part of your business and downtime can be one of the most costly consequences of an equipment failure.

Through our many years in business, we have experienced many customers with a strategy like: ***“If it breaks, I will call you, and you will come fix it”***.

We always do our utmost to help with your firefighting and we are ready to provide service on demand. It is our experience that most failures can be avoided with regular equipment maintenance.

Our vision at SANOVO Service is to give you the tools to protect your investment. This includes training and education of your operators and maintenance personnel.

We know that it is not possible to hand over years of knowledge and experience, so in cases of more complex problems, we recommend a long-term and secure strategy that includes a customized SANOVO Service Contract.



## Sign up for our educational training programs at SANOVO Service Institute

The SANOVO Service Institute is set up to support you and your organization with technical knowledge in order to maximize machine performance and efficiency.

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

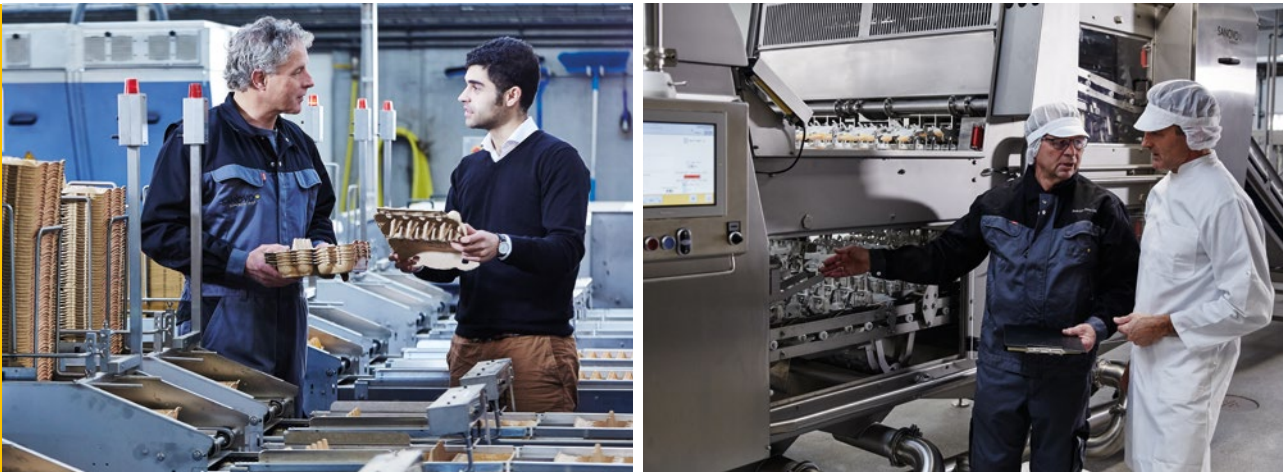
Our qualified and highly skilled instructors have many years of experience in training your operators and maintenance staff. We offer a balance between theory and practice in our state-of-the-art training facilities that are fully equipped with operating machines.

We have developed educational programs for your operators and maintenance staff that are specifically tailored to your

SANOVO equipment. This allows for a more detailed learning of the machine configuration ensuring maximum output performance.

The program consists of a number of modules individually adapted for both operators and maintenance staff, specific to SANOVO equipment.

Sign up or get more information about our educational training program:  
[www.sanovogroup.com](http://www.sanovogroup.com)



# A global player but close to you

Our objective is to contribute to the ongoing success of your business, and whether you are a small-, medium- or large-sized company, we turn your eggs into valuable business.

Providing complete solutions for the egg processing industry has been our main activity for more than 60 years, and it still is. However, we specialize in many other business areas such as enzymes, pharma, hatchery and spray drying, which give us the opportunity to interact and build relationships with a variety of prospering industries.

We believe in personal relations and know that our team of skilled professionals is the key to mutual success and trust. Gathered from all over the world, they provide know-how and deliver the right service and solutions in close cooperation with you as a customer.



**SANOVO**   
TECHNOLOGY GROUP

SANOVO TECHNOLOGY GROUP

Odense - Denmark

TEL +45 66 16 28 32

info@sanovogroup.com

 **a THORNICO**  
*company*



PurePrint® by **KLS**  
Produced 100% biodegradable  
by KLS PurePrint A/S

[www.sanovogroup.com](http://www.sanovogroup.com)