



Turn your **eggs**
into a valuable business

SANOVO 
TECHNOLOGY GROUP

A photograph of three men shaking hands outdoors. The man on the left is wearing a dark sweater over a white collared shirt. The man in the middle is wearing a dark sweater over a light blue collared shirt. The man on the right is wearing a dark blue work jacket. They are all smiling and looking at each other. The background is a blurred outdoor setting with trees and a path.

You benefit from our **passion** and **drive**

At SANOVO TECHNOLOGY GROUP we develop and supply process solutions for the egg industry of exceptional quality and reliability.

Our innovative engineering for the egg industry started in 1961, and today SANOVO TECHNOLOGY GROUP is the world leader, employing 430 people and serving customers in more than 100 countries. With our headquarters in Denmark and 10 regional office around the world, we are always within easy reach.

We are part of the dynamic and privately-owned conglomerate THORNICO run by Thor Stadil and his son Christian Stadil.

Our **ambition** is to be the world's leading developer and supplier of technological solutions that ensure affordable proteins for a growing world population.

The ongoing **success** of **your** business is our main concern

Supplying complete solutions for the egg processing industry has been our main activity for more than 60 years and it still is. However, as the only supplier in the world, we also 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 various 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.



Egg Packing

Packing eggs coming from the hen house into 30-egg trays.



Egg Grading

Sorting, checking and packing eggs into egg cartons.



Robotic Automation

Automatic handling of egg trays, cartons and pallets with eggs.



Egg Processing

Breaking eggs and producing liquid egg and powder products.



Functional Ingredients

Enzymes to improve the functionalities of egg powder and liquid.



Powder Processing

Spray drying of industrial applications and liquid egg products.



Inoculation & Harvesting

Machines to the pharma industry for production of vaccines.



In-Ovo Vaccination

Vaccination of the chicken inside the egg.



Egg Packing

We handle your eggs with care

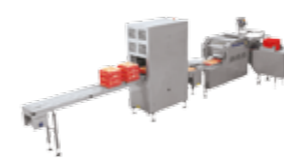
1956, we developed and supplied our first farmpacker and since then our focus has been to make sure that farmers around the world are able to pack their eggs in the smoothest, most trouble-free way. We know the challenges of a rough environment and the importance of having a reliable, easy-to-maintain packing machine.

We offer innovative, high quality and high performing farmpackers, repackers and hatchery machines with a capacity range of 40 to 200 cases per hour.

With the focus on low maintenance, reliability, easy cleaning and gentle egg handling, our range of compact and space efficient machines provide you with flexible and efficient production facilities.

The high reliability is derived from experienced engineering and our categorical use of high quality materials. As an example, we use minimal plastic parts to avoid frequent replacement of egg holders and other wearable parts, and the simple technical solutions enable you to maintain the machine without any special tools or knowledge.

All machines pass an extensive test before being shipped to customers all over the world, so you can expect a reliable and efficient packing machine from day one and for many years ahead.



Farmpackers

Successful design is more than just shapes and great lines. It's also about sensing that the equipment is exactly right. A dynamic, robust design, with the smallest footprint, made to pack eggs in the most natural way – straight line, point down.

Capacity up to 72,000 eggs/hour
(200 cases/hour)



Hatchery packers

In order to secure an optimal output, fertilized eggs must be handled in the most gentle way. The hatchery packers are designed to meet the high requirements and are capable of handling a wide range of setter trays.

Capacity up to 28,000 eggs/hour
(78 cases/hour)



Farmgraders

Our Farmgrader 80 takes the utmost care of the eggs not to inflict any damage. The use of mechanisation also minimizes the interaction and the potential threat of outside contamination by humans being in contact with each individual egg.

Capacity 28,800 eggs/hour
(80 cases/hour)



Egg Grading

More throughput with less stress and higher egg quality

At SANOVO TECHNOLOGY GROUP we have designed a wide range of mechanical and electronical graders the flexibility to meet the requirements of the individual customers. This includes small flexible low capacity grading units up to dedicated grading stations with the highest capacities in the market.

Choosing an egg grader from SANOVO TECHNOLOGY GROUP, means your eggs will be handled in the gentlest way - from loading and until they are safely positioned in the carton.

This is secured through a simple design, ensuring that each individual egg is handled as gently as possible. The simple design also has the advantage of less wear and tear along with low maintenance costs and superior labor efficiency.

Our egg graders handle all popular packaging throughout the world.



Alpha

The Alpha is a robust and reliable egg grading and packing system designed for egg producers with low capacity. Despite its simple design the Alpha machines incorporate most of the hygienic features available.

Capacity up to 45,000 eggs/hour (125 cases/hour)



Ardenta

The Ardenta series is recognized for its efficiency, which is comparable to the biggest grading stations. The proven design and technology significantly reduce the time required for cleaning, and maintenance, realizing a very competitive cost per graded and packed egg.

Capacity up to 108,000 eggs/hour (300 cases/hour)



OptiGrader

Developed and launched in 2012, the OptiGrader has quickly become the preferred choice for high volume grading. This is due to the simple and hygienic design, which makes the grader extremely reliable in a challenging seven days a week in-line or double shift operation.

Capacity up to 216,000 eggs/hour (600 cases/hour)



GraderPro

The GraderPro has the highest grading capacity ever seen in the market. Combined with the small footprint, low maintenance and full automation, this makes it the most efficient grader available.

Capacity up to 288,000 eggs/hour (800 cases/hour)



Robotic Automation

Improve performance of
your factory with automation

Optimize the performance of your factory with automation. If you want your production to remain competitive, you must consider robotic automation.

Robotic automation plays an important role in turning your eggs into a valuable business, and at SANOVO TECHNOLOGY GROUP we can help you implement a fully automated logistics system ensuring you can produce at the lowest possible cost.

Today, almost all manual operations can be replaced by automation including time-consuming functions such as palletizing, de-palletizing, case packing and case palletizing. Our wide robotic automation program offers a number of efficient and flexible robots ready to be installed at your factory.

However, robotic automation is not only a question of reducing labor. At the same time, automation will increase biosecurity, improve product quality and maximize yield.



Palletizing

The Palletizer is very flexible and capable of handling both plastic and pulp without changing tools. At the same time, it replaces a very tedious manual operation which is known to cause operator fatigue.



De-Palletizing

For fast and reliable operation, the de-palletizer will fulfill all your needs for safe and flexible unloading of eggs, thus decreasing the need for manual work.



Case Packing

Gentle packing of eggs into boxes with no manual operation needed. Handles two packing lines at the same time with very high precision.



Case Palletizing

The Case Palletizer handles a wide range of cases/crates gently and efficiently. It is capable of packing four different types of cases/crates on four different pallets.



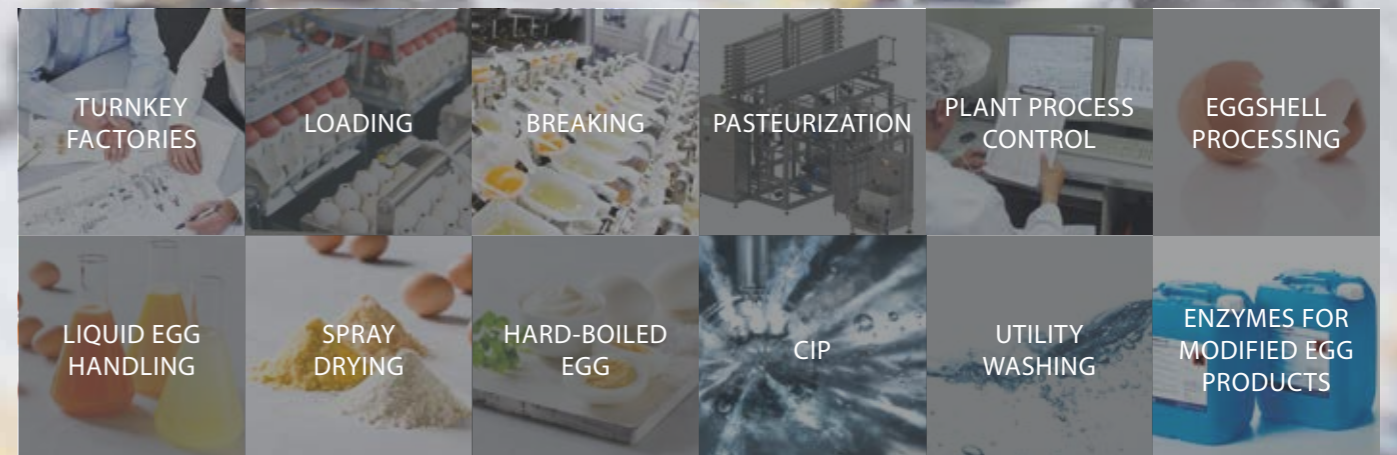
Egg Processing

Adding value to your eggs

The increased demand for processed eggs in the food industry gives you the opportunity to turn your eggs into valuable food ingredients. With production and assembly in our European factories, we have been the world leader within egg processing for decades. Today, we are trusted to deliver the best service and the highest machine quality on a global level.

Our customers benefit from our turnkey solutions and processes. Our concept includes consulting, installation, on-site training, food technology know-how and maintenance. Your dedicated contact person makes sure that all aspects of your plant are considered.

As a customer with SANOVO TECHNOLOGY GROUP, you have access to the most dedicated and experienced service technicians and all of their know-how within egg handling and processing. Whether you are considering starting up processing or need to evaluate your current setup and performance, we welcome you to start a dialogue with our egg specialists.





Egg Breaking

All egg breaking and separation machines are based on the same patented technology to achieve a high yield and superior quality in separation.

Capacity up to 216,000 eggs/hour (up to 600 cases/hour)



Pasteurization

From small standardized skid mounted plug-and-play pasteurizers to advanced high capacity configurations for specialized products with the possibility of adding wave technology. Capacity up to 15,000 L/hour



Hard-Boiled Egg

Automatic boiling, cooling and gentle cracking and peeling to ensure high quality of de-shelled brown and white eggs.

Capacity 8,400 or 20,000 eggs/hour



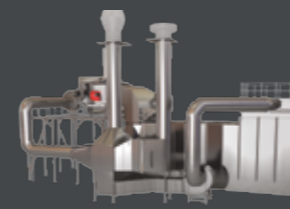
Functional Ingredients

In industrial food processing, the functional properties of the egg products are crucial. At SANОВО PROCESS SOLUTIONS we can help you standardize and even improve the functional properties of the egg products and by that increasing the value.



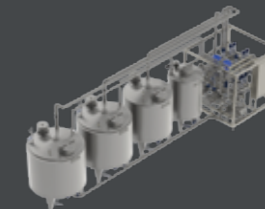
Turnkey

Our experts map your needs and possibilities to propose the right solution for your plant. We work closely with you through the entire project and continue to support you after the project has finished.



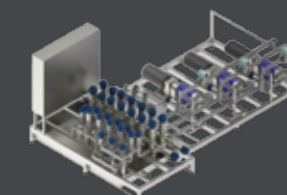
Spray Drying

The Spray Dryers are horizontal and are available in a wide range of capacities and designed to meet the need of the individual customer.



CIP

We offer different options for CIP, cleaning-in-place, depending on cleaning demands, both manual and automatic system are available.



Plant Process Automation

We design systems ranging from manual to complete automated systems to provide the best flexibility and product security needed.



Powder Processing

The SANOVO Boxdryer technology combines high performance with gentle air drying for your benefit

SANOVO Gentle Air Box Dryer is a better alternative to traditional spray drying towers for production of powder from a wide range of ingredients and food products. The SANOVO Box Dryer offers a number of unique benefits for you and your projects.

Everything in a box - The SANOVO Gentle Air Box Dryer produces high quality powders at the lowest energy consumption. The technology is characterized by an improved insulation, hygienic design, simple operation and long running time between cleanings.

The SANOVO box dryers are available in different sizes up to 4000 kg water evaporation per hour and as the only European supplier of box dyers, SANOVO complies with the industrial standards such as CE, ATEX, EN.

Challenge us with your products



Reserve time for a test trial

We have installed a box dryer to carry out trials for our existing and new customers. We invite you to send us a sample of your liquid product, in order to test the quality and properties of your spray dried product produced with our Gentle Air Box Dryer.

We will plan a reference visit for you at one of our existing customers' plants.

This gives you the possibility to see the box dryer in action and learn from others' experiences.

This is an ideal opportunity for you when developing new products for the market.



In-Ovo Vaccination

Accurate vaccine delivery
and reduced risk of contamination

Commercial poultry production is larger than it's ever been before, and your responsibilities in the hatchery have never been greater.

Some of the challenges that accompany this growth include the demand for higher hatchability rates, greater sanitation and improved solutions to fight diseases. With all of this happening alongside increased competition and cost pressures, poultry producers need a partner committed to providing advanced technologies and flexible support.

Our core focus is to develop and provide advanced in-ovo vaccination systems to help hatcheries cost effectively improve flock health and increase poultry production.



SANOVO VAX

A cost-effective in-ovo vaccination system developed with the focus on three core objectives: prevention, protection and production. Multiple distinct technologies combined to ensure improved hatchability, consistently accurate vaccine delivery and reduced risk of contamination in a high-production capacity environment. These features, among others, make SANOVO VAX Series the most technologically advanced in-ovo vaccination system available on the market.

Capacity up to 62,000 eggs / hour depending on configuration.



Inoculation & Harvesting

Egg cultured vaccines

RAME-HART offers a comprehensive portfolio of egg inoculation and harvesting solutions, with technologies that cover the entire spectrum in relation to vaccine harvesting.

As global communities interact more frequently, the repercussions may be severe due to the swift transmission of an influenza virus across international borders. Additionally, existing influenza viruses often mutate into new viruses that are far more harmful to people.

All of this underscores the unpredictability of influenza virus transmissions and the need for well-thought-out preparedness programs. Vaccine manufacturers can best rely on proven, precision-engineered RAME-HART egg inoculation and harvesting technologies to scale up production and rapidly expand capacities to reach more people in shorter periods of time.

RAME-HART systems are fully compliant with strict global industry regulations such as U.S. Food and Drug Administration and European Union (EU) standards.

There are more than 3,000 RAME-HART installations in more than 120 countries, all proving the reliability and quality of RAME-HART products every day.



Inoculation

Fast, precise and reliable egg inoculation expedite vaccines to market.

RAME-HART's egg inoculation systems are designed to help you enhance your production capacity, thanks to automated capabilities that increase processing speed and minimize product contamination.

Our systems operate fast and reliably, giving you an invaluable head start in bringing your vaccines to market.



Harvesting

Advanced egg harvesting technologies boost yields.

RAME-HART's egg harvesting solutions improve productivity and minimize the physical handling of eggs while performing multiple operations, including eggshell removal, egg-inspection and harvesting itself. With our advanced technologies, you can now process more eggs and deliver higher vaccine yields.



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. Know-how from SANOVO Service will help you achieve this goal.



Training & Education

Ensure high yield and minimize downtime with training in the SANOVO Service Institute.

The training is set up to support you and your organization with technical know-how in order to maximize machine performance and efficiency. We have developed educational programs that are specifically tailored to your SANOVO equipment.



Service Contracts

Control your operational costs and ensure the systems' lifetime with our Service Contracts.

When you sign up for a customized contract, we will work with you to make an assessment of your needs to fit it to your specific requirements.



Spareparts Webshop

Our customized Webshop provides easy access for you to order new spare parts for your equipment.

In your personalized Webshop, you will find interactive 3D plans of your equipment, and orders can be placed with just a click on the spare part needed.

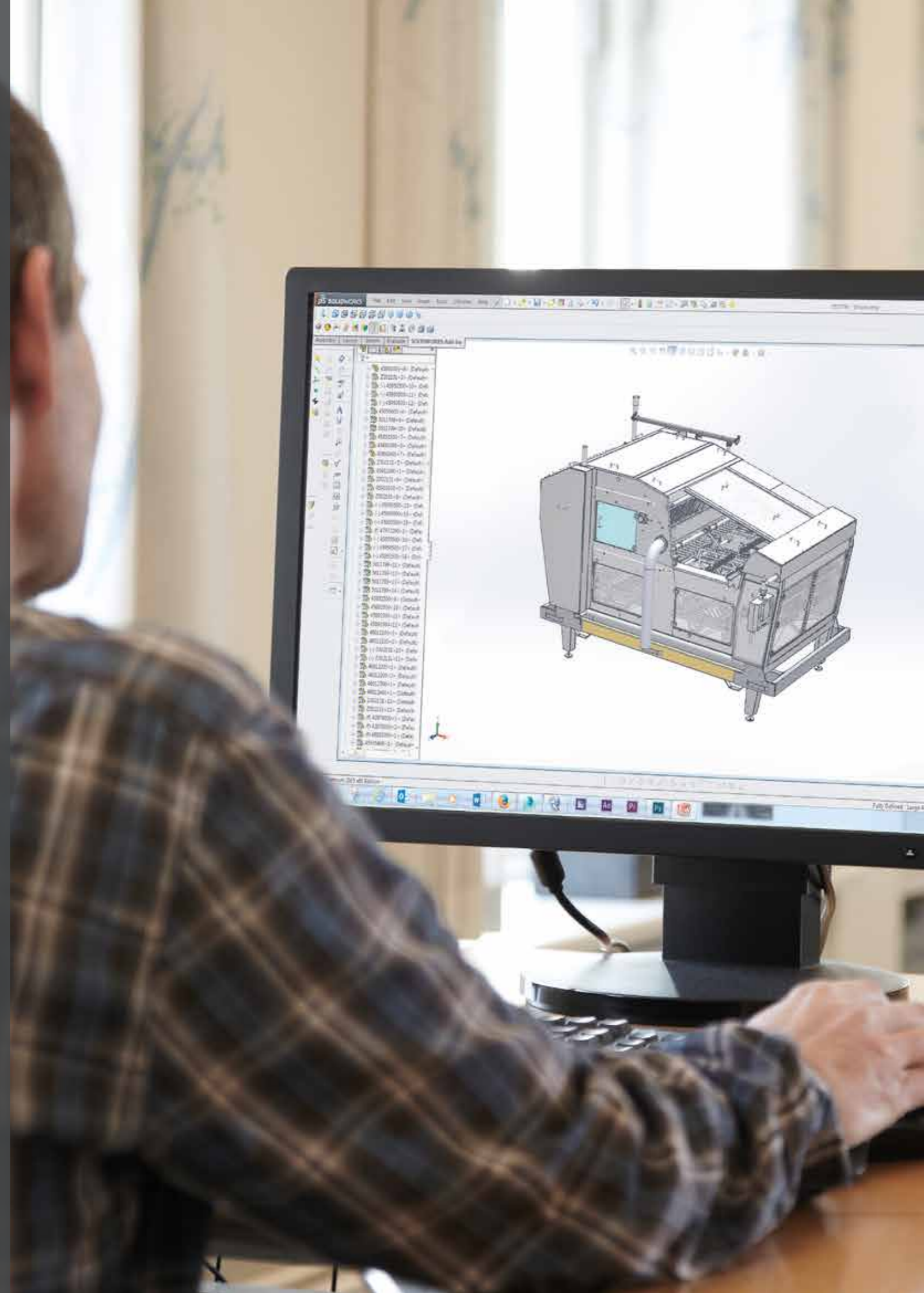
We are Engineering Tomorrow

Dedicated employees are constantly pushing the boundaries to discover new ways of improving your business.

The engineering team cooperates with the field engineers along with the service and support teams and our sales force to combine their know-how and develop new technologies.

This is done with a close focus on market developments and your challenge to meet the requirements of your customers. Step by step we will strive to improve your business in everything that we do.

All equipment is manufactured at SANOVO TECHNOLOGY GROUP and passes through extensive testing before being handed over.



Your **trust** is our most valued asset

At SANOVO TECHNOLOGY GROUP our customers are the most important assets and we want you to feel this. When you place an order with us, you become part of a dedicated global organization who thrives on making your production and business a success.

The complexity of today's modern egg processing, grading and robotic automation installations is very high and it requires expertise and knowledge to make a successful integration.



Work process in steps

Your project involves the entire organization of SANOVO TECHNOLOGY GROUP

Every step of the way - from initial request and sparring on finding the best solution, drawing of layout, manufacturing of equipment to installation at the plant and operator training, our experienced project and service managers will be at your service.



Doing good while doing business

Not only do we care about the UN Global Compact Principles, we have taken this to a new level of holistic thinking, giving ownership and actively encouraging increased involvement and shared leverage with customers, partners and other branches.

For us, Company Karma covers everything from our employees showing social responsibility by volunteering to train the local football team, to our company providing free equipment for a hen farm in Swaziland or reducing energy usage at our plants.

We believe that initiatives need to be embedded in our key business to make it credible. We try, wherever possible, to create quadruple winning situations where we, together with our companies, customers and partners, engage in a cause that we believe in and find important.

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