Food Processing and Packaging Systems

- Food Processing
- Selo Solutions
- Packaging Machines
- Meat Processing
- Pet Food Processing
- Artificial Casings
With our expertise regarding mixing, cooking, emulsifying and homogenisation, our knowledge about laws and regulations in the food sector and years of experience, we always offer a suitable customised solution.

Whether it is a standard solution or a customised solution, Selo always delivers a turnkey solution. Turn-key means that our project managers supervise projects from start to finish.

Selo also provides CIP (clean-in-place) and SIP (sterilize-in-place) systems. In our own testing facility, process steps can be simulated and test batches can be produced. In addition to the desired product parameters, also the latest standards in the field of HACCP, EHEDG and safety are taken into account.

Selo is the supplier of various innovative machines and systems for the production and processing of food products.
SOUP SYSTEMS
Selo is the supplier of fully automated process and production systems for the preparation of ready-made, pasteurised, fresh soups. The soup systems can be developed and configured tailored to your needs.

SAUCE SYSTEMS
Selo produces fully automated process and production lines for cooked, pasteurised and cooled sauces, such as pizza sauce, pasta sauce, spaghetti sauce and meat/vegetable sauces (with or without particulates).

MAYONNAISE & DRESSING SYSTEMS
Selo supplies fully automated process and production systems for cooked, pasteurised and cooled products, such as mayonnaise and dressings.

KETCHUP SYSTEMS
Selo offers two options regarding the production of ketchup and ketchup-like sauces: the batch line and the continuous line. Both lines are well-suited for the production of real ketchup, starch-based ketchup and sauces, like gipsy sauce and ‘Schaschlick’ sauce.

BABY FOOD SYSTEMS
Producing baby food is a special niche in the food industry: it is vital that the baby food systems meet the highest hygiene requirements. Selo supplies systems that are fully automated. The range of machines we supply are suitable for cooked, pasteurised and cooled baby food products.

BAKERY INGREDIENTS SYSTEMS
Selo supplies machines and systems that are suitable for the production of bakery ingredients. Our systems make the toppings for patisserie, desserts and cake. These toppings are jelly products with fruit as the basic ingredient.

JAM/MARMELADE SYSTEMS
Selo produces fully automated process and production lines for cooked, pasteurised, and cooled products, such as jams and marmalade. Selo offers a range of different systems. On the one hand, manufacturers offer jam without chunks, completely homogeneous. On the other hand, there is the desire to actually keep the pieces of fruit in the product. We will determine your exact wishes and will give you advise on which system is most suitable for your product(s).

ASEPTIC FRUIT SYSTEMS
Selo produces fully automated process and production lines for cooked, pasteurised and cooled products, such as toppings for desserts. Our systems make toppings based on fruit that resemble jelly. The aseptic fruit toppings are often used for desserts and pies, e.g. jam, berry or cherry topping on a cheesecake. It is vital that the fruit used for desserts is aseptic – meaning that it is sterile, free of germs. Selo’s systems distinguish themselves from the traditional preservative industry by means of sterilising the packaging in advance. The fruit is then processed (pasteurisation, for example) and packaged cooled and completely sterile.

“SELO PROVIDES BOTH STANDARD AND TAILOR MADE TURNKEY SOLUTIONS ENGINEERED SPECIFICALLY FOR YOU.”
By means of a vision system, in combination with special software, the system can be used in a multi-purpose mode. The product that should be picked up is scanned by a camera, which then passes on the position of the product to the robot system. The gripper then picks up the product in the desired position and deposits it in a pre-programmed pattern, with speeds of up to 150 picks/min. (depending on the product). This makes it possible to load trays, flow packers, stretch wrappers and other machines in a flexible way.

Selo applies the latest technological advancements to develop/engineer various methodologies and systems. This approach assures you of a unique, tailor-made solution for your particular situation. Thanks to our industry knowledge and many years of experience, we can add value in every phase of your project, in line with your requirements.

Selo supplies a wide range of solutions for controlling, grouping, handling and positioning of packaged and unpackaged food products.

SELO HYGIENIC DELTA ROBOT

Selo closely tracks development in the field of robotics. Moreover, we design, program and develop complex robotic systems and various state-of-the-art robotics applications. In the processing and packaging industry, a lot of Selo’s robotics solutions lead to a more efficient and high-quality production process.

The Selo Pick & Place robot is a stainless steel delta robot equipped with titanium arms and an optional of a rotation axis. The robot can be equipped with different grippers, so that Selo can always offer a suitable solution for your automation issue.
SELO JAR FILLING SYSTEM

In the Selo Jar Filling System, both glass jars and cans can be filled with a desired number of sausages. The system takes over the jars/cans from a central system, after which they are positioned to be filled with the sausages.

Sausages can be supplied in bulk, both with the help of a trolley or a central transport system. The sausages are then separated after which an operator visually inspects and corrects the sausages on a compartment belt.

A special transfer system then ensures that the correct number of sausages are positioned in a product holder. This product holder can close and ultimately has the same diameter as the jars/cans to be filled. A side load system moves the sausages from the product holder into the jar/can.

Optionally it is possible to twist the sausages into the jar.

FULLY AUTOMATIC LOADING SYSTEMS

The Selo fully automatic loading systems load cheese or meat on a plastic or cardboard tray. The system is equipped with a high end vision system which takes very sharp photos of the sliced products. In this way the system knows exactly the deviation of the deposition angle and centerline of the sliced products compared with the set values. After detecting the deviation, the system will correct the sliced portion to these values.

The system can also be equipped with a fully automatic denester. The denester will place trays into the main system at the right moment. The system places the sliced products exactly on the denested tray.

Selo can integrate a system for any type of product, whether it’s a horizontal or vertical packaging machine. Our systems are designed with hygiene in mind and we exclusively use food-grade materials.

All systems are made with a stainless steel frame and with hygienic transport systems.

Examples of different types of Selo infeed systems
- "Intakter" or smart infeed systems for confectionary
- Ultrasonic systems (sealing, slicing)

FULLY AUTOMATED SANDWICH/PANINI LINES

Selo supplies fully automated sandwich lines. These sandwich lines are designed with the utmost focus on hygiene, of course only food-grade materials are used.

By automating your sandwich production you increase efficiency, improve hygiene, speed up your production process and create consistent quality sandwiches. All of which helps you to achieve a higher ROI.

Because of the modular design, the lines are very flexible in use and can be engineered to accommodate your specific needs. The system uses a centering system and an ultrasonic cutting system for accurate cutting of the product.

SELO FILL DOSING PUMP

Compact servo-controlled dosing pump for all viscous liquids, sauces, dressings, etc. The servo-controlled gear pump can be set so that the dosing speed is perfectly adjusted to the product. Each rotation of the gear results in a portion. At the end of the cycle, the product is withdrawn into the pump so that dripping is avoided.

SELO ACCUMULATION TABLE

Stainless steel table for accumulation and feeding of products at the end of production and packaging lines. The robust frame is adjustable in height and designed according to the most modern hygienic demands.
In 2015, Selo entered into a strategic partnership with the Japanese company Omori Machinery Company Ltd.

The long-standing cooperation between the two companies has been intensified by the joining of Omori as co-shareholder of Selo. Selo also became the home base for Omori Europe B.V. Omori Europe is active in Oldenzaal with equipment in the field of flexible packaging.
STRETCH WRAPPERS

Stretch wrappers are supplied through Omori Europe, official partner of Selo. Stretch wrappers are packaging machines that are very suitable for the food industry. A broad range of food products is packaged at a very high speed using the stretch wrapper: meat, fish, vegetables and fruit in a dish or tray.

HORIZONTAL FLOWPACKERS

Horizontal flow packers are supplied through Omori Europe, official partner of Selo. Omori Europe offers a range of horizontal flow packers: machines for small one-piece packaging and low production amounts, to complex machines for large packaging amounts.

TEA PACKAGING MACHINES

As a partner of Selo, Omori Europe supplies tea packaging machines. A fully automated machine that can produce standard tea bags and triangular (pyramid) tea bags at a speed of 200 bags per minutes is the Twinkle TPB-200. The Twinkle is equipped with a range of sensors for identifying any errors. This reduces the downtime of the machine.

FOR MORE INFORMATION

Omori Europe B.V.

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"DIFFERENT OPTIONS AND DIFFERENT METHODS DEVELOPED TO THE LATEST RETAIL TRENDS."
Selo provides both standalone operation meat machinery and complete production lines for the production of meat and meat products.

Most of the machines are standard machines, coming from partners with whom Selo has build up a long-lasting relationship.

**MEAT PROCESSING**

**SLICERS**

Selo has its own slicer specially designed for integration into production lines. The products are carefully sliced and deposited. By using high-quality band knives combined with the Selo-developed blade guide, the products are cut without inflicting any damage. The result is an undamaged cut and attractive product.

**FLATTENERS**

Irregular pieces of meat, such as fresh pork, beef, veal and poultry are flattened by the Selo flattener. The flattener is developed in such a way that the meat does not lose any of its liquids after flattening.

**GRINDERS**

Meat grinders are suitable for the finely chopping, mixing or grinding of meat. As a result, the meat pieces can be reduced in size without lowering its quality. The grinders supplied by Selo are easy to use and contribute to an efficient meat processing line: increased production and less manual labour.

**CUTTERS**

Selo supplies cutters for (raw) meat products with a bowl capacity of 120 l to 1200 l. The cutters are extremely suitable for cutting and mixing meat and fish at temperatures of -18 to +85 °C. The cutters are available in different versions and with various options. For example, the machines can be equipped with a vacuum or cooking function. Due to the exclusion of air (vacuum), the end product has a longer shelf life. Better extraction of proteins also increases the moisture and fat absorption of the product. The cooking function ensures considerable time saving in the production process. Both options also provide better preservation of taste, color and an even more stable end product.
PROCESS MACHINES

The innovative process machines combine the following production steps into one machine: pre-reduction, mixing, fine reduction and homogenising, and can thus provide a machine that is capable of executing the entire process on a minimum surface area.

KONTI CUTTERS

The unique cutting system of our konti cutters comprising cutting plates and hole plates, is without touching parts and therefore has a number of significant advantages.

The product is sucked through the hole plates and the cutting plates, and reduced in size in that way. The degree of decrease and emulsification of an end product can be precisely set by means of the number of plates and the size of the holes in the plates.

EMULSIFIERS

Selo supplies horizontal and vertical emulsifiers, suitable for fine cutting and emulsifying meat, for example for the sausage production or a pet food emulsion. The emulsifiers are available in different versions. Plate system standard, or single plate system rotating and stationary. Advantages of Selo’s emulsifiers include the very low wear and ability to emulsify very fine products with coarse pieces.

SMOKING, COOKING AND COOLING INSTALLATIONS

Selo provides a wide range of machines in the area of thermal treatment, for example, smoking, cooking and cooling installations. Meat is often processed by means of a smoke or cooking system wherein the desired taste ensuring the desired taste and quality of the meat.

BREAKERS

Our breakers are machines that are able to reduce frozen meat in size without degrading it, thus guaranteeing the quality. The frozen meat blocks are literally broken into smaller pieces of meat.

MIXERS

Selo supplies mixers suitable for meat and other products in the food industry. These mixers mix products fast and intensively without damaging the product in the process. If desired, the mixers can be fitted with cooking, vacuum and/or cooling functions.

VACUUM FILLERS

Vacuum fillers extract air from the product, which means the product remains fresh longer and thus has an extended expiration date. Products that are filled with a meat mixture (e.g. artificial casings that are filled with meat dough) benefit from a vacuum process.

“SELO SUPPLIES BOTH STANDALONE MEAT PREPARATION MACHINES AND COMPLETE PRODUCTION LINES”
Our delivery program varies from meat preparation to packaging and sterilisation. With our expertise and experience we support our customers not only with technical solutions but also with technology regarding recipe development and process improvements.

PET FOOD PROCESSING

Selo has more than 75 years of experience in the meat processing and pet food preparation. The last 25 years Selo has become one of the world leaders in turn-key solutions of wet pet food systems based on steam tunnel technology.

“WE MEET THE HIGHEST REQUIREMENTS IN THE PET FOOD INDUSTRY”

MEAT KITCHEN

To prepare all kinds of meat (beef, pork, fish or other animal protein) from frozen blocks, or to process fresh meat into an emulsion, breakers, grinders, mixers and emulsifiers are being used in the meat kitchen.

Mixers
Selo’s mixer assortment entails a broad range of different types of mixers. These can be equipped with various options, making them an excellent choice for various applications. The mixers are available in sizes 30 l up to 6.000 l (other sizes on request).

Breakers
Breakers are machines that are able to reduce frozen meat in size without degrading it, thus guaranteeing the
quality. The frozen meat blocks are literally broken into smaller pieces of meat.

**Emulsifiers**
For fine shredding and emulsification of the meat Selo offers emulsifiers. These emulsifiers distinguish themselves in the market by means of the plates: the cutters are in fact based on hole plates (fixed and rotating) instead of knives and plates.

**EMULSION HOPPERS**
To guarantee a continuous supply of meat-emulsion to the extruder of the steam tunnel, a product-buffer will be used. The buffer consists of a single tank with a mono pump connected to supply the extruder with emulsion.

**EXTRUDERS**
Selo also supplies extruders. The extrusion unit is executed for installation in a wet pet food line, located over the belt of the steam tunnel. The unit will form stripes/ropes or a slab, ready for cooking in a continuous process.

**COLOUR INJECTION**
To inject a colour in-line, a pet food line can be executed with a colour injection system. This implies running a base emulsion through the system. Part of the emulsion, fed to one part of the extruder, will be injected with a colouring agent. The other flow of emulsion will not be coloured. This results in different coloured chunks from both parts.

**STEAM TUNNELS**
The steam tunnel is the state-of-the-art system for the production of wet pet food. In the steam tunnel is the emulsion (ropes) being cooked with condensing steam. The speed of the belt and the steam supply are set to cook until the desired result is achieved.

**CUTTING UNITS**
The cutting unit is developed to cut ropes, coming with a continuous flow and cooked by the steam tunnel in pre-determined lengths. When the cooked ropes leave the steel belt, the infeed belt transports the ropes into the cutting unit.

**COOLING BELTS**
When using a cooling unit, ventilators blow ambient air at the ropes, coming from the steam tunnel; ambient air is blown directly on the product. After the cutting of the ropes also the chunks are cooled by a cooling belt.

**GRAVY UNITS**
Gravy can be produced in batches. Water is added to a tank and heated with steam and circulated with a pump. The pre-weighed dry materials are manually added and mixed in the water. When the gravy mix is ready for use it is pumped into a buffer tank. In the buffer tank a pump is circulating the gravy mix continuously. The gravy is pumped into the chunks & gravy mixing unit as a percentage of the chunk flow. The chunks, produced by the steam tunnel system, and the gravy produced by the gravy installation, have to be mixed into a specific mixture. This can be done either in a one shot fill or a two shot fill system. The filling can be done in trays, cans or pouches.

**STAND-UP POUCH FILLING AND SEALING MACHINES**
Selo supplies integrated solutions for pouch filling in combination with one or two shot filling (chunks and gravy). The chunk supply by buffer belts and multihead weigher is integrated above a pouch filler with a capacity between 80 – 160 pouches/min. The pouch filling is done with pre-made pouches, as pre-made pouches give more flexibility and guarantee a better seal quality.

**AUTOMATION AND CONTROL**
Automation and Control is an important part of the turn key delivery of a wet pet food process line. Selo implements both Allen Bradley and Siemens controls with recipe control, batch reporting and remote service support.
ARTIFICIAL CASINGS

Selo supplies different types of artificial casings with different barriers. Artificial casings with a high barrier offer protection against discolouration or oxygen penetration next to guaranteeing extended freshness of the product. We always produce the artificial casings exactly to your wishes: with your own print and choice of a wide range of colours.

ARTIFICIAL CASINGS

Selo has been supplying top quality edible and non-edible artificial casings for many years now and supplies different sizes, calibres and colors for both the Dutch and Belgian markets.

CELLULOSE CASINGS

Selo supplies cellulose casings that are suitable for spreadable and/or raw sausages, smoked sausages or semi-cured sausages. The cellulose is a binding agent that provides high quality casings. The cellulose casings are characterized by a high level of elasticity and are range faithful.

The major benefit of cellulose casings is that they absorb the desired colour and flavour components of the cooking process, but protect against undesired aroma influences. The perfect peelability guarantees fault-free production. Selo supplies cellulose/peel casings in 'standard peel' or 'easy peel'.

COLLAGEN WRAPPING

Collagen wrapping is an invisible second skin for roulade and ham. This wrapping is packaged around the meat to keep it fresh longer. Selo supplies collagen wrapping that is made from the subdermis of cattle. Meat products wrapped in this second skin remain fresh longer and look tasty. The collagen wrapping can be easily processed and can be smoked and cooked.
COFFI-NET INNOVATION

Coffi-net is a Selo innovation that allows for the large-scale production of traditional-looking meat products. Coffi-net is rolled up collagen wrapping with netting. The rolled up collagen wrapping is placed around an interior tube and the elastic netting is wrapped around the outer tube. The Coffi-net tube can be connected easily to both manual and fully automated filling lines. Meat products with Coffi-net can also be clipped using all standard clipping machines.

FIBROUS CASINGS

Fibrous casings are casings suitable for smoked sausages, cooked sausages, dried sausage types and ham products. Selo supplies fibrous casings that are made from cellulose and are reinforced with a fibrous membrane. It is possible to supply these fibrous casings with a coating on the inside so it can be easily removed (easy peel).

COLLAGEN CASINGS EDIBLE

Edible collagen casings are suitable for the production of sausage products; fresh bratwurst, dried sausage types, frankfurters and snack products. Collagen is a protein that forms glue and that performs an important function within connective tissue. Selo’s edible collagen casings consist of high-quality animal protein and can be easily processed and smoked. The casings are available in straight and round shapes.

NETTING

Selo not only provides for the production and delivery of synthetic casings, but also provides all required products regarding the meat processing and packaging process. For instance, we provide various types of netting that are suitable for the production of roulade, ham and fricandeau. The netting is suitable for both boiling and roasting.

COLLAGEN CASINGS INEDIBLE

Selo supplies inedible collagen casings of a high quality. The casings are suitable for the production of cooked, dry and semi-dry sausage types. The casings are made from natural protein. Because of the permeability of the casings, moisture and smoke easily penetrate, which benefits the flavour.

SPECIALTIES

Selo offers the option of providing casings (which won’t be smoked) with a coating. This coating will be placed on the interior of the casings and can transfer colour and flavour to the product. This allows you to provide your sausage with a traditional colour or specific flavour.

FOR MORE INFORMATION OR FOR ORDERS

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Selo has its own in-house service team. This means that we can support you in case of faults, training and technical issues. Selo has internationally deployable technicians with extensive experience and excellent training. Numerous national and international companies have been making use of this service for many years and appreciate our flexible deployment. Our service team is available 24/7 and will solve your engineering and automation issues expertly.

The reliability of your machinery, means of production, and processing equipment will, in the most part, be determined by your maintenance policy. The primary objective of this policy is to minimise waiting times and downtime. Preventive inspections and maintenance, as well as the timely replacement of wear parts, ensure breakdowns and downtime are kept to a minimum. Therefore, Selo offers to carry out periodic, preventive maintenance on installations supplied by us, via a service contract. Of course, this depends on your needs and requirements.

For more information
service@selo.com

Meat processing machines
+31 (0)541 582 020

Food & Petfood installations
+31 (0)541 582 002
Selo supplies turnkey installations. In addition to a short standard operator training, our customers can choose an additional customerspecific technical training. These trainings are application-oriented and are specially designed for the user.

During the course, the following items are dealt with:
• Installation and maintenance of the system
• Replacement of parts
• To solve malfunctions
• Making backups

Further details:
• When the training is concluded we will issue you with a certificate
• Training location: at the customer
• Up to 5 participants

For more information contact our training coordinator
✉ training@selo.com
For many companies, production automation is essential for their business operations. A good production system ensures optimum efficiency, quality, improved working conditions and sustainability. Your quality will increase, your cost price will be reduced and you can continue to be competitive in the future.

Selo’s automation department offers solutions in the field of production automation, industrial automation and process automation everywhere in the world. Selo employs engineers, a technical team as well as software experts that are able to jointly come up with a complete solution.

**Remote support**

Selo offers this facility for your new or existing installations. All you have to do is create an internet connection and place a modem close to the machine. On the basis of a subscription, it is possible to call in through remote support. In this way, our engineers can remotely access the control of an installation to detect malfunctions and possibly remotely resolve them. Additionally, it is possible to install a webcam so that the programmer can look into your issues at a distance.

**For more information**

✉️ service@selo.com
Our dedicated spare part team is available for all your spare part needs. They ensure a fast and efficient delivery of the required parts. If we have the ordered parts in stock, then we will send them to you from our warehouse on the same day of the order. Your production process will continue optimally thanks to this fast service. Thanks to a large supply of parts and a well-trained service team, we can provide expert advice on the range of parts and machines. You ensure that your production is as efficient as possible by buying the right parts.

Please contact us if you wish to order parts or if you want advice regarding parts.

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An important part of Selo is its engineering department. This department develops state-of-the-art applications in the field of process and packaging systems. A qualified team of engineers with a long time experience in the food industry will help you with issues regarding your specific production process.

The projects will only be completed when you, as our customer, are fully satisfied. The quality is guaranteed by designing the procedures in detail and defining them in advance. We strive for sound cooperation with our clients by maintaining contact, evaluating and always being open to feedback.