

A LAND FULL OF CONTRASTS, WHERE THE ALPS EMBRACE THE CRYSTAL CLEAR WATERS OF THE SEA, WHERE THYME COEXISTS WITH MARITIME PINES AND WHERE CHAMOIS CONTEMPLATE THE SEA. THESE ARE THE LIGURIAN ALPS, A WONDER OF NATURE! IN THE HEART OF THIS PRISTINE TERRITORY FULL OF SURPRISES, 1,380 METERS ABOVE SEA LEVEL, FLOWS THE PURE WATER BOTTLED BY THE SANTA VITTORIA SRL COMPANY, AN EXCELLENCE OF LIGURIA, AS UNIQUE AS THE SURROUNDING AREA.

SANTA VITTORIA

➤ **WATER SECTOR**
SANTA VITTORIA
Pornassio (IM), Italy



COMPLETE 25,000 BPH LINE FOR PET BOTTLES CONSISTING OF:

- Integrated blowing-filling-capping system ECOBLOC® ERGON 10-80-15 KL HEVS
- DAT 10/10 accumulation system
- Secondary packaging system consisting of DV 500 ERGON divider, conveyor belts and SK 502 F ERGON shrink wrapper
- APS 3090 P SX ERGON palletising system



STATE-OF-THE-ART TECHNOLOGY MARRIES TRADITION

From 2000 to the present day, when Santa Vittoria was acquired by the Ballestra family of Bordighera (Imperia), the company has become an excellence of Liguria and the West. This is also due to the continual investments within the production departments, such as the recent project involving SMI and ENOBERG for the supply of a new complete 25,000 bph (0.5 L) line for bottling and packaging three different bottle formats PET (500 ml, 1500 ml and 2000 ml) of still and sparkling water, in cylindrical and square bottles. In this plant, advanced technology blends harmoniously with the company's tradition in all phases of the industrial process, from bottling to palletising, which are managed by automated systems to ensure products that are as safe and pure, as

the environment that created them.

The new investment was contemplated right down to the smallest detail, creating strong teamwork between Santa Vittoria and the designers at SMI and ENOBERG. The entire production process has been designed to keep every aspect of the bottling, packaging and handling of products within the line under constant control.

The new plant includes an integrated ECOBLOC® ERGON system, consisting of a latest generation SMI EBS 10 KL ERGON stretch-blow moulder and an electronic volumetric filling system ENOBERG 80-15 HEVS for natural and sparkling water. For the secondary packaging, Acqua Santa Vittoria chose an extremely compact solution, which meets the logistical needs of the plant and

adapts perfectly to the available space. It is a packaging system for the packaging of both cylindrical and square bottles that includes a DAT 10/10 accumulation table, a DV 500 ERGON divider, conveyor belts and an SK 502 F ERGON twin-lane shrink wrapper. The divider, belts and shrink wrapper work in sync, as if they were a single block, ensuring a very smooth packaging process. In addition, the adjustments of the belt guides are automatic, while the management of format changes is done directly from the machine panel, greatly simplifying the operation and maintenance of the entire line. The process ends with the tertiary packaging made in 800x1200 and 600x800 mm pallets by an automatic palletising system of the APS 3090 P ERGON series.



FOCUS ON SANTA VITTORIA



In the beating heart of the Ligurian Alps, the westernmost peak of the thousand-year-old peaks of Europe, a crossroads of dreamy natural contrasts, at 1,380 meters above sea level, where the air maintains a constant temperature of 6°C, there is an environment where time seems to have stopped, preserving the purity and original essence of its resources. We are in the municipality of Montegrosso Pian Latte, a jewel set in the province of Imperia, embraced by the protected area of the Regional Park. Here in impeccable environmental conditions, Acqua Santa Vittoria is born. The company of the same name was founded at the end of the eighties and the new owner (the Ballestra family of Bordighera) took over in 2000, with an investment of almost 4 million

euros to renew the plants, which today produce about 80 million bottles a year with a workforce of 18 employees.

The production of natural water in Liguria is not quantitatively as consistent as in the other Alpine plants, but it is of the highest quality, and Santa Vittoria is the main protagonist of this sector, an excellence that exports its products from Liguria abroad, even as far as China!

In its long history, Santa Vittoria has perfected an approach to production that combines quality and flexibility, thanks to an intricate network of underground pipelines that gently transport water directly from the source of Montegrosso Pian Latte to the productive heart of Pornassio.

The latter is located in a strategic position to reach the main motorways and the port of

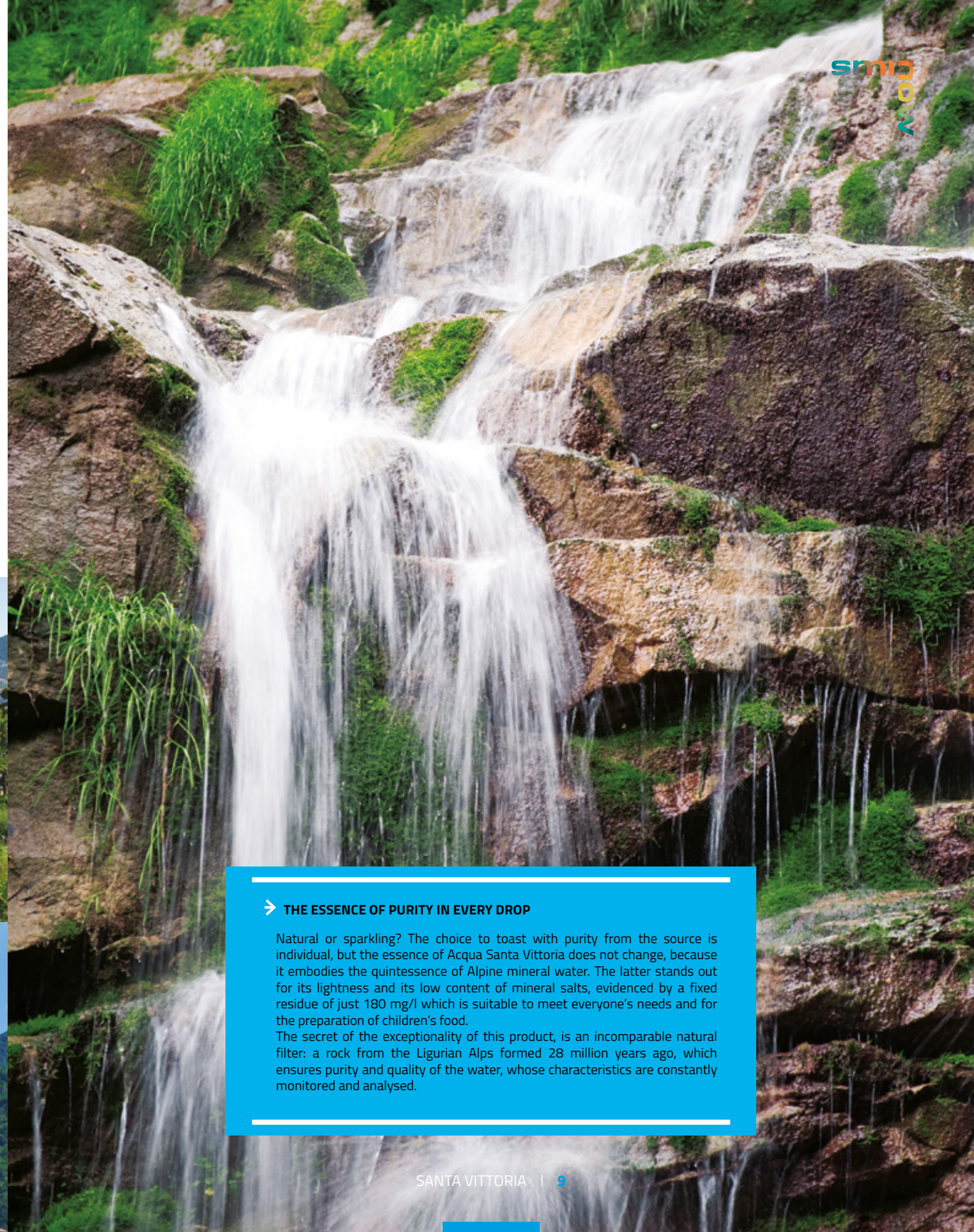
Genoa, a crucial hub for international trade. The commitment to sustainability is concrete and measurable, investing in renewable energy, such as the installation of a major photovoltaic system that allows the plant to maintain an ideal energy balance and minimise environmental impact with a significant reduction in CO₂ emissions. A further step towards the future has been made by using 30% recycled plastic in the production of PET bottles and by adopting 'Tethered Caps', a solution that fulfills sustainability strategies to avoid the dispersion of caps in the environment.

VALLE ARROSCIA: LIVING LAND FROM THE BEACHES TO THE MOUNTAIN HUTS!

From the beaches of Alassio, Albenga and Laigueglia, to the highest mountain in Liguria, passing through centuries-old villages and grandiose monuments, the Mediterranean landscape becomes alpine and leads into the civilisation of mountain huts and shepherds. The charm of the Arroscia Valley is encapsulated in the beauty of the landscapes with an alpine flavour, in the simplicity of the people and its “white cuisine” made of poor but nutritious ingredients. A territory that is equally affected by the warm and humid winds of the sea, the low temperatures and the rainfall typical of the Ligurian Alps.

Behind Albenga is the alluvial plain, dotted with greenhouses and crops, home to excellent products such as the violet artichoke, trumpet courgette, violet asparagus and ox heart tomato. Villanova and Ranzo historic strongholds defending the plains, are located in a crossing point between the plains and the mountains, famous for the Taggiasca olive and Pigato wine. The village of Vessalico is famous for the cultivation of the renowned garlic, while Pieve di Tecò, the capital of Arroscia, is the gateway to the Alps. On one side Rezzo, with its castle and the spectacular Arroscia waterfalls, on the other Pornassio, while Mendatica is the starting point to reach Monte Saccarello (2201

m), the highest peak in Liguria. On the border between Piedmont and Liguria, Pornassio lives a double life: Alpine in the north and Mediterranean in the south. Vineyards, olive groves and woods surround the mountain municipality with its many resources. It is the land of Ormeasco di Pornassio wine, known as “Dolcetto dei Saraceni”, and of the pure water bottled by Santa Vittoria. An excellence of Liguria that, thanks to the eco-friendly use of the territory, has been able to preserve the characteristics that make it unique.



➔ THE ESSENCE OF PURITY IN EVERY DROP

Natural or sparkling? The choice to toast with purity from the source is individual, but the essence of Acqua Santa Vittoria does not change, because it embodies the quintessence of Alpine mineral water. The latter stands out for its lightness and its low content of mineral salts, evidenced by a fixed residue of just 180 mg/l which is suitable to meet everyone’s needs and for the preparation of children’s food.

The secret of the exceptionality of this product, is an incomparable natural filter: a rock from the Ligurian Alps formed 28 million years ago, which ensures purity and quality of the water, whose characteristics are constantly monitored and analysed.

SMI AND ENOBERG SOLUTIONS

PET CONTAINERS THAT ENHANCE PURITY AND LIGHTNESS

FOR THE EXCELLENCE OF LIGURIA AND THE WEST

For Western Liguria, the Santa Vittoria company represents a cutting-edge reality in the use of renewable sources, respecting the territory and its resources and a guarantee for the constant supply of the shelves of large-scale distribution. Over the years, this industrial reality has developed a flexible, efficient, quality and eco-sustainable production system, also thanks to the collaboration with strategic partners such as SMI and ENOBERG, which have recently supplied a new complete line for bottling and packaging cylindrical and square PET bottles of three different sizes (500 ml, 1500 ml and 2000 ml) at the maximum speed of 25,000 bottles/hour.

The entire bottling, packaging and distribution process was designed to ensure sustainability, efficiency, preservation of product quality and purity and optimal use of production space.

The new SMI and ENOBERG line makes use of the latest generation technological solutions, which allow the use of lighter plastic bottles, made with 30% recycled material.

The production of sparkling water accounts for about 70% of the total, which, in addition to Santa Vittoria branded water, also meets the large volumes required by the "private label" products of Lidl, the European giant of large-scale distribution, Coop and Conad.

The engineering project for the new Santa Vittoria line also involved the study of the PET containers produced by the SMI stretch-blow moulder and bottled by the ENOBERG filler.

The customer asked the SMI designers to revise the existing cylindrical bottle both aesthetically and functionally, especially for the handle section.

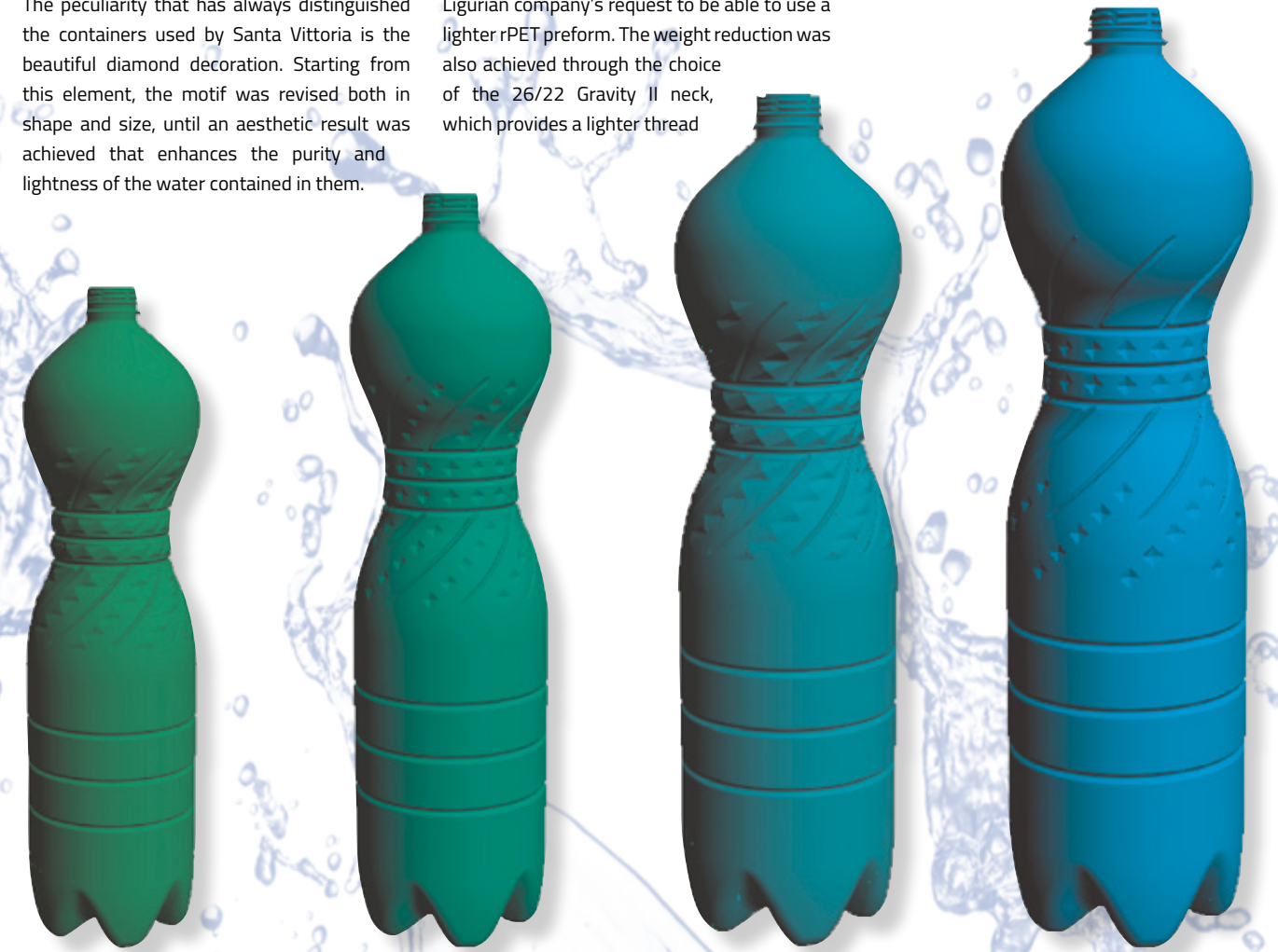
The format on which SMI staff focused for the development of the new design is the 1.5 L bottle, from which the smaller 0.5 L bottle is derived.

The peculiarity that has always distinguished the containers used by Santa Vittoria is the beautiful diamond decoration. Starting from this element, the motif was revised both in shape and size, until an aesthetic result was achieved that enhances the purity and lightness of the water contained in them.

The evolution of the study was marked by the close collaboration between SMI and Santa Vittoria, to the point of creating a customised version of the project with a suitable decoration and an adequate distribution of the same on the container. In addition, the development also led to the decoration becoming lighter and giving an end result of a very elegant, functional bottle, easily recognisable on the market.

The performance of the container was also carefully analysed and improved, especially in the part of the handle, to respond to the Ligurian company's request to be able to use a lighter rPET preform. The weight reduction was also achieved through the choice of the 26/22 Gravity II neck, which provides a lighter thread

suitable for bottling carbonated products. Starting from all these aesthetic and functional assumptions, the SMI team began to develop the new "concept", maintaining the style of the existing bottle, but making changes to the position and shape of the handle and the bottom, optimising the shape and proportions of the latter, in order to be able to use lighter preforms for the blowing of bottles without altering the resistance.





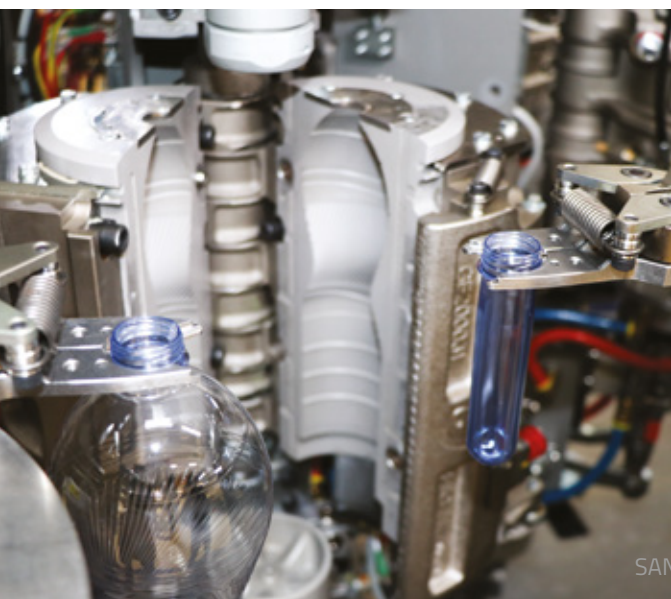
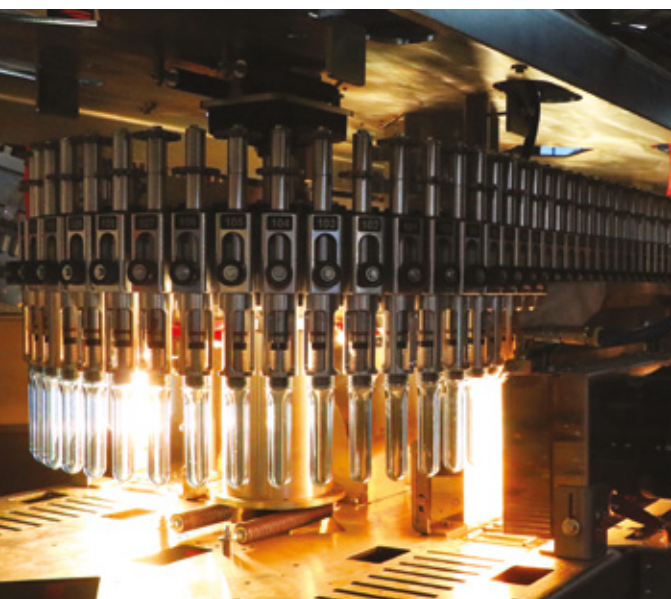
WATCH THE FULL VIDEO

» ECOBLOC® ERGON KL HEVS

Functions: stretch-blow moulding, filling and capping of PET bottles of still and sparkling water at a maximum speed of 25,000 bph (0.5 L.). In particular: 0.5 L and 1.5 L cylindrical bottles and 0.5 L, 1.5 L and 2 L square bottles.

» Key features of the EBS 10 KL ERGON stretch-blow moulding module:

- compact design, which ensures high speeds despite the limited space. The preform heating section is integrated with the stretch-blow moulding section
- quick and easy format changes: the preform feeding system is equipped with adjustments by means of numerical position counters, which speed up format change operations
- energy saving: stretch-blow moulding carousel equipped with motorised stretching rods controlled by electronic drives, which guarantee precision in operations and energy savings (no compressed air is required and power consumption is lower than solutions with linear motors)
- reduced oven consumption: optimised chain steps according to the preform diameter, with a consequent reduced number of preforms present in the oven and advantages on consumption
- reduced transport costs: the EBS KL series is very compact and can be easily transported in a container
- high-efficiency preform heating: system of heat-reflective panels in energy efficient ceramic composite material, positioned both in front and behind the lamps to ensure uniform heat distribution
- reduced mechanical intervention: the servo motor automatically adjusts according to the production speed
- quick and easy installation and start-up operations
- efficient stretch-blow moulding system: high-performance valves and low dead volumes (-50%) which ensures reduced pre-blow moulding and blowing times and better quality of the bottles produced
- less wear and greater precision in the management of the blow moulding machine: handling of the grippers based on springless preform/bottle grippers equipped with desmodromic cams
- advanced automation through Motornet System®: constant maintenance of optimal processing parameters during the entire production cycle, direct modification of the machine settings, simplicity of format change operations and the possibility of temporarily disabling one or more moulds if necessary
- simple and intuitive Posyc® operator interface
- predictive maintenance: machine equipped with a state-of-the-art meter to detect electricity consumption, compare it, monitor it, etc.



» Key features of the 80-15 HEVS filling and capping module:

- magnetic flowmeter technology
- volumetric electronic filling ensures high filling accuracy
- the 80-15 HEVS filling and capping system meets the needs of hygiene, safety and cleanliness, minimising the possibility of product contamination
- the structural parts of the machine are designed in such a way as to avoid the stagnation of liquids
- the inclined plane of the base ensures the continuous drainage of liquids from the inside of the filling environment to the outside
- the welded frame is made of AISI 304 stainless steel, without any iron parts, which guarantees a solid and rust-free structure
- the filling chamber is completely isolated from the transmissions, which do not come into contact with the liquid to be bottled
- the filling taps are made of AISI 316 stainless steel
- easy adjustment and settings of the machine parameters that can be performed directly from the HMI touch panel
- filling system equipped with dummy bottles with automatic insertion
- easy access to all parts of the filler for complete and efficient maintenance
- fully washable filling tap and CO₂ loading/unloading circuit
- independent channel dedicated to bottle depressurization
- format changeover without equipment
- complete bottle bottom cooling with water recirculation and cooling plate
- machine designed according to Industry 4.0 parameters, to ensure complete automation of processes and electronic management of movements, all synonyms of maximum reliability
- the movement of the machine's carousel is entrusted to sturdy gears positioned in the base of the machine.



➤ LINEAR DISCHARGE ACCUMULATION TABLE DAT 10/10 (DISCHARGE ACCUMULATION TABLE)

During the design and construction of the bottling line supplied to Santa Vittoria, particular attention was paid to the container and product handling systems, which is a key element in ensuring high plant efficiency.

Function: automatic system to receive transport and offload the bottles.

Key features:

- suitable for shaped containers (rectangular, square or oval); in the system supplied to the customer, all bottles, both round and square, processed by Santa Vittoria pass through the DAT 10/10 unloading and accumulation table
- pressure-free system, thanks to a sorting device that preserves the quality of the product during handling
- simple operation: at the infeed, the product arrives on the conveyor belt in single lane, spaced out and without pressure, and is "accompanied" towards the accumulation table by a 90° translation system
- the translation system is made up of a pair of belts with a modular chain and rubberised surface to protect the bottles
- in the central part, the accumulation table functions as a "multi-way" belt made up of several lanes side by side; the 10-lane model installed in Santa Vittoria is the largest of the DAT series
- the products are fed to the accumulation table one lane at a time (one lane enters and one lane exits); In the event of a downstream stoppage, a first batch of containers enters the accumulation table to complete the first lane of the belt, followed by the other lots occupying the remaining lanes
- the outfeed product unloading conveyor belt receives the containers from the accumulation table and, without any stoppage, sends them to the single-lane belt and the packaging line.



➤ SYNCHRONISED SYSTEM FOR SECONDARY AND TERTIARY PACKAGING CONSISTING OF: DV 500 ERGON DIVIDER + CONVEYOR BELTS + SK 502 F ERGON SHRINK WRAPPER + APS 3090 P SX ERGON PALLETISER

➤ DV 500 ERGON DIVIDER

Key features:

- it is a compact and flexible system for dividing the bottles arriving in single lane from the DAT 10/10 into 4 or 6 lanes and laning them to the SK 502 F twin-lane shrinkwrapper, which then packs them in 4x3 single-lane or 3x2 double-lane formats (depending on the bottle)
- continuous-motion divider, whose regular operation is ensured by the control of the availability of the product at the machine infeed (which automatically manages the working speed) and by the machine stop device

➤ CONVEYOR BELTS

Key features:

- optimised production process: conveyor belts equipped with automatic adjustment of the guides from below
- fast and precise modification of conveyor belt parameters, such as width and height, automatically and without human intervention
- management of format changes from the machine control panel: to switch from one format to another, the operator must select the desired format from the control panel and the line adapts accordingly, with real-time belt configuration
- reduction of machine downtime, typical of systems with manual adjustment of the guides
- increased plant efficiency due to improved accuracy of operations and fewer human errors
- the management and maintenance of the entire line is easier.





➤ **TWIN-LANE SHRINKWRAPPER SK 502 F ERGON**

Processed product: 0.5 L and 1.5 L still and sparkling water PET bottles; 2 L square PET bottles of still water.

Processed packages: 3x2 bundles in film only in twin lane (0.5 L – 1.5 and 2 L bottles) and 4x3 film only in single lane (0.5 L bottles).

Key features:

- hi-tech solution for twin-lane packaging of film-only bundles
- high performance and energy saving: the SK ERGON are fitted as standard, with SMITEC ICOS motors equipped with integrated servo-drives
- reduced maintenance thanks to self-lubricating chains, an innovative solution that offers two important advantages: it eliminates the danger of altering the packed goods as no lubricant is used and does not require the periodic maintenance, typical of systems with classic chains
- simplified format changeovers: the shrink wrapper's standard infeed belt is fitted with a series of side guides that greatly simplify format changeover activities, reducing the time to switch from one pack configuration to another and maintaining high production efficiency
- advanced automation and intelligent data analysis: SK ERGON machines have their own digital intelligence, which allows you to install an optional line supervisor of the SWM series to record, analyse, optimise, automatically modify production and operating parameters, exchange data and perform self-diagnostic activities to detect and solve faults or anomalies or signal the need for maintenance to the operator.



➤ **AUTOMATIC PALLETISING SYSTEM APS 3090 P SX ERGON**

Packaged containers: bundles in film only, from the SK 502 F ERGON shrink wrapper.

Pallets made: euro pallets 800x1200 mm and 600x800 mm.

Key Benefits:

- simple and intuitive man-machine interface, which allows the operator to easily and quickly manage all end-of-line palletising operations
- easy integration of the system into packaging lines
- low operating and maintenance costs.



ALPINE BALCONY OVERLOOKING THE SEA

The peculiarity and uniqueness of the Ligurian Alps is given by the fact that, forming a wide curve that runs towards the coast, they extend parallel to the Ligurian Riviera. It is a middle ground, which on the one hand offers alpine scenery and mountain traditions, while on the other landscapes, culture, climate and folklore that come from the sea. There are no other territories that have this uniqueness and particularities, so much so, that this area of Italy resembles an alpine balcony overlooking the sea, an environment where time seems to have stopped, preserving the purity of its resources. For these reasons, the natural water of Santa Vittoria, which flows from the heart of this extraordinary territory, in the far west of the Liguria region, is pure, uncontaminated and unique.

Santa Vittoria water is not simply a vital element; it is a love song of the earth, it is a symphony of crystalline drops that tell stories of ancient traditions, of perfect natural balances and of an indissoluble bond with the land of the Ligurian Alps.

Toasting with still or sparkling water of Santa Vittoria is a tribute to life, it is a journey through taste and authenticity, which brings with it the memory of unspoiled landscapes, wild nature and a priceless heritage.

Nuova Santa Vittoria...

...l'acqua della Liguria

