

EMPRESAS POLAR

*Investing to satisfy
a growing market*



IN THIS EDITION



04.



18.



30.



52.



50.



42.

- 04 Portugal: Águas de Carvalhos
- 18 Spain: Sant Aniol
- 30 Venezuela: Empresas Polar
- 42 Packaging gives value to products thanks to eco-sustainable solutions
- 44 Paper or plastic? Solutions that answer the big question of the market
- 50 POSYC® 5.0: The HMI changes look
- 51 Mini-ICOS: integrated digital servo drives
- 52 APS 620: User-friendly control and management of minipals
- 54 SMI strengthens its presence in Turkey
- 56 A new virtual tour to discover the latest SMI news

EDITORIAL 2025/30

Putting the sustainability
of production processes
at the forefront



Historically, the success of companies has always been measured by their economic profit.

Today, this method of judgment has in part been downsized, as a broader concept has taken hold that evaluates the success of a business while also taking into account the actions it has taken, to make our planet a healthier environment in which to live and thrive.

In this issue of SMI NOW we will talk about important successful companies, such as Águas de Carvalhos in Portugal and Sant

Aniol in Spain, which focus on the sustainability of production processes and respect for the environment; to achieve these objectives, both these industrial companies have relied on SMI to install an EBS 8 KL ERGON stretch-blow moulder in their plants for the creation of sustainable packaging solutions.

Whereas, in Venezuela, the Empresas Polar company has installed an SMI shrink wrapper from the CSK 40 T ERGON series, capable of optimising the packaging process, reducing energy consumption and safeguarding the ecosystem in which it operates.

Numerous market research shows that more and more consumers are oriented towards buying food products from companies that demonstrate a green vocation, by choosing eco-friendly packaging solutions.

For this reason, the choice of machinery and systems designed to provide maximum performance, in terms of operational efficiency, energy saving and the use of recyclable materials, plays an important role in the growth strategies of every operator in the food & beverage sector.

SMI constantly invests in R&D activities to offer a wide range of machines for primary, secondary and tertiary packaging, that allows its current and potential customers to face the ecological transition process without problems, to improve the brand reputation and to increase success on the market.

Thank you for your attention and I hope you enjoy your reading.

Paolo Nava, President & CEO, SMI S.p.A.

sminow | magazine

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Product pictures in this issue are shown for reference only.

CARVALHELHOS IS A BENCHMARK IN THE WATER SECTOR IN PORTUGAL AND ONE OF THE LEADERS IN THE EXPORT MARKET. THE BOTICAS-BASED COMPANY FOCUSES ON THE ENVIRONMENTAL SUSTAINABILITY OF ITS PRODUCTION PROCESSES, WHICH WILL BE FURTHER IMPROVED THANKS TO THE INSTALLATION OF A NEW EBS 8 KL ERGON STRETCH-BLOW MOULDER BY SMI, FOR THE PRODUCTION OF NEW rPET CONTAINERS WITHOUT PLASTIC LABELS.

CARVALHELHOS



➤ **SECTOR: WATER**

ÁGUAS DE CARVALHELOS

Beça, Boticas, Portugal

carvalhelhos.pt

➤ EBS 8 KL ERGON Rotary Stretch – Blow Moulder



GEO LOCATION



CARVALHELHOS

QUALITY WATER FOR OVER A CENTURY

Nestled in the pristine Barroso region of northern Portugal — an area revered for its lush landscapes and natural spring — lies a remarkable story of healing and heritage. Among these springs, the waters of Carvalhelhos have long been celebrated for their therapeutic virtues. First discovered in 1915 by a shepherdess who found relief from her injuries by washing her feet in the spring, the miraculous nature of the water was quickly brought to national attention, thanks to a photographer from Porto who documented her recovery. What began as a quiet tale of healing soon became a national phenomenon.

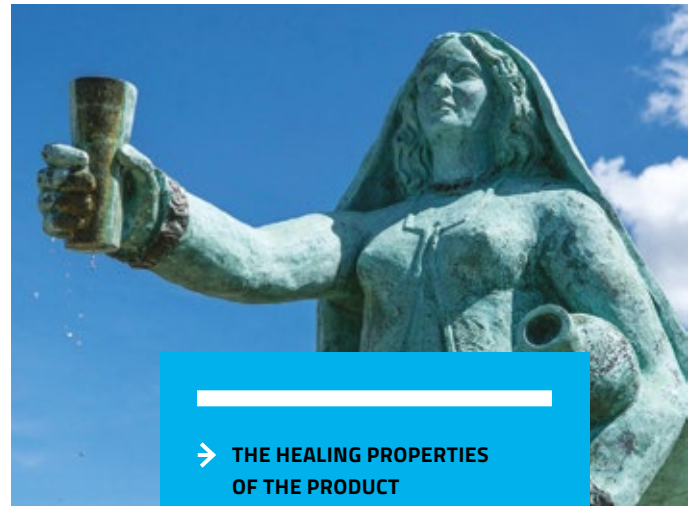
The shepherdess, a true Barrosã, remains a symbolic figure to this day. Her image continues to embody the soul of the brand and features prominently in the logo of Águas de Carvalhelhos, the company that has proudly bottled this natural treasure for over 110 years. From the beginning, Águas de Carvalhelhos has upheld a deep respect for the purity and origins of its mineral waters. Bottled at the heart of a UNESCO-protected

heritage region, the company applies stringent environmental criteria to preserve the nobility of its aquifers. This dedication ensures that the water retains the same remarkable properties that first captivated Portugal over a century ago.

In alignment with its mission to blend tradition with innovation, Águas de Carvalhelhos has partnered with SMI for the supply of a cutting-edge EBS 8 KL ERGON rotary stretch-blow moulder. This technology supports the production of PET bottles — with and without labels — enhancing efficiency while honoring the brand's sustainable values. Today, the unique character of Águas de Carvalhelhos natural mineral waters remains unchanged, a testament to the enduring quality of the region's aquifers. With two state-of-the-art facilities in Beça, within the municipality of Boticas, just 35 kilometers from the historic Roman city of Chaves, the company operates advanced bottling lines for both PET and glass containers — solidifying its leadership in both national and international markets. Águas de Carvalhelhos' unwavering commitment to excellence has

earned it distinguished recognition over the years. In 2000, the company was awarded the ISO 9002 certification by APCER, a milestone that was later elevated with the prestigious ISO 9001 certification — testaments to its rigorous quality management systems. Further affirming its reputation as a steward of natural purity, the company has also received honors such as the Aquallia Award for Best Water, among other accolades that celebrate its dedication to delivering nature's finest to consumers. With every bottle, Águas de Carvalhelhos carries forward a legacy over a century in the making — sharing the pure essence of Portugal's natural heritage while inspiring a life of wellness, vitality, and harmony with nature





➤ THE HEALING PROPERTIES OF THE PRODUCT

Thanks to a unique mineral balance, Águas de Carvalhelhos has remarkable healing properties.

This gift of nature is especially suitable for treating disorders of the digestive and circulatory systems and for dermatological diseases. It also helps prevent kidney stones from forming naturally and maintain the correct hydration.

The quality of the water bottled in the Beça plant is the result of the combination of two extremely important factors: on the one hand, the purity of the source, uncontaminated and curative, and on the other hand, the use of a rigorous production process by the Águas de Carvalhelhos company, which makes use of exemplary industrial plants, filling lines equipped with the most modern technologies and internal laboratories capable of carrying out any analysis on a wide range of parameters, to ensure water quality and compliance with HACCP standards.



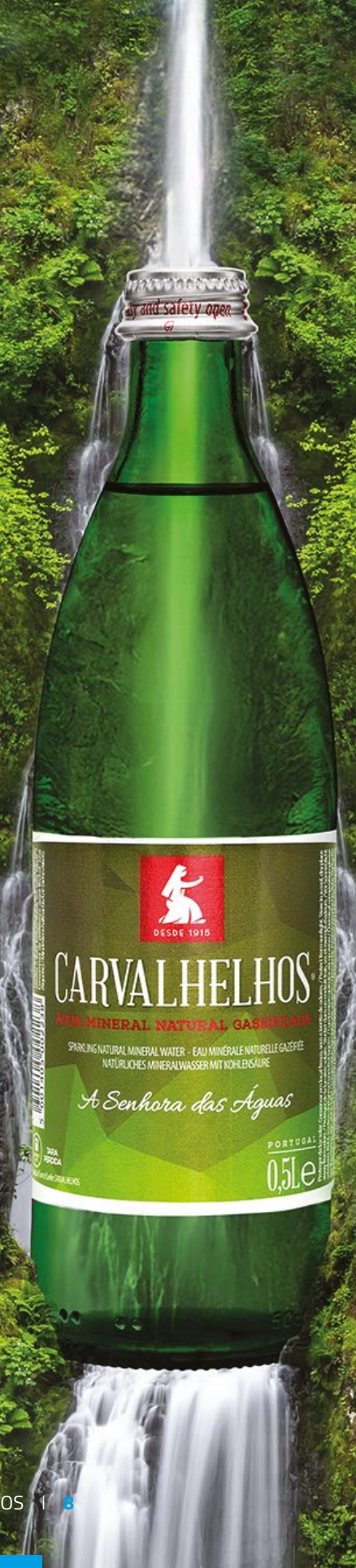
LUCY & STELLA, SPRINGS OF WELL-BEING

The Carvalhelhos brand is associated with the town of the same name, located in the Barroso region, a preserved environment in the heart of the Serra do Barroso mountains in northern Portugal, at an altitude of 750-800 meters.

Here, the product bottled by Águas de Carvalhelhos flows naturally from the two traditional mineral water springs, called Lucy and Stella, in honor of the daughters of the company's founder.

The Lucy and Stella springs have been known for more than 150 years, although it is documented that the therapeutic and medicinal properties were already known in the period of the Roman

Empire, as demonstrated by some archaeological discoveries that have brought to light the remains of the Castro Romano of Carvalhelhos and numerous spas.



110 YEARS OF CARVALHELOS: A LEGACY OF PURITY, A FUTURE OF POSSIBILITY

The origins of Águas de Carvalhelhos trace back to 1915, with the founding of Caldas Santas de Carvalhelhos.

From the very beginning, this iconic Portuguese company has stood out for its unwavering commitment to quality and well-being, offering consumers the pure excellence of naturally bottled mineral water.

In its early years, bottling was performed manually, and distribution was primarily through pharmacies, reflecting the water's recognized medicinal value.

A turning point came in 1961, with the installation of the company's first automatic filling line — boasting a then-unprecedented capacity of 6,000 bottles per hour — positioning it as the most advanced facility of its kind in Portugal.

As demand for bottled water surged in the decades that followed, the company responded with bold investments in production infrastructure.

A major milestone was reached in 1975 with the construction of a modern 15,000-square-meter facility, which remains a benchmark in the industry to this day. Over time, production capacity expanded dramatically, first to 33,000 and later to 40,000 bottles per hour.

Anticipating shifts in consumer packaging trends, Águas de Carvalhelhos became one of

the pioneers in Portugal to adopt PET plastic for food-grade containers. Recognizing its potential early on, the company invested heavily in technology to support large-scale PET production.

In 2004, the company embraced product innovation with the introduction of new offerings aligned with evolving market preferences, such as the launch of "Carvalhelhos Limão".

By 2015, the brand celebrated its centennial with a refreshed corporate and brand identity, unveiling a modern logo and redesigned label to mark the occasion.

Today, Águas de Carvalhelhos continues to blend tradition with innovation.

The latest example is its collaboration with SMI, reinforcing its leadership in sustainable packaging.

The introduction of new PET bottles — available in 0.33L, 0.5L, and 1.5L formats — features a label-free design made possible by advanced moulds from SMIMEC, installed on the EBS 8 KL ERGON stretch-blow moulder.

This cutting-edge process customizes each bottle with an embossed Carvalhelhos logo and essential product information, including Braille, directly engraved onto the packaging — eliminating the need for paper labels and reaffirming the brand's role as a pioneer in environmentally conscious solutions.





INVESTING IN FRIENDLY SOLUTIONS FOR THE ENVIRONMENT

The entire activity of the Águas de Carvalhelhos company revolves around a quality policy based on customer satisfaction, employee involvement and the promotion of activities to improve production processes and aim for product excellence. To achieve this, the Portuguese company continuously invests in clean technologies, promoting energy savings, circular economy and waste reduction. From these concepts comes the idea of developing, in collaboration with SMI, a new rPET bottle without the application of traditional paper or plastic labels. An increasingly trendy solution among the main bottlers in the sector, which allows to improve and facilitate the recycling of materials as it does not have labels that must be separated from the container during recycling operations. In addition, the bottle can be 100% recycled and the use of glue required for label application is eliminated.



smi
now

SMI SOLUTIONS FOR ÁGUAS DE CARVALHELHOS

The Portuguese company has involved SMI for the supply of a new rotary stretch-blow moulding system from the EBS 8 KL ERGON series and for the study and development of new PET and rPET containers with and without plastic labels. It is a state-of-the-art, intelligent and interconnected system, equipped with the most modern automation and IoT technologies, with strong eco-compatibility characteristics.



➤ ROTARY STRETCH – BLOW MOULDER EBS 8 KL ERGON

Functions: stretch-blow moulding of PET bottles for natural water at a maximum speed of 18,400 bottles/hour (format 0,33 L).

Bottles worked: 0.33 L, 0.5 L and 1.5 L cylindrical containers

Main features:

- compact design, which, in a single module, integrates the preform heating section with the stretch-blow moulding section
- fully automated, ergonomic and "user-friendly" system, capable of interconnecting with digital networks and meeting the criteria of Industry 4.0 and Transition 5.0 in terms of flexibility and operational efficiency
- solution that promotes sustainable production for a future oriented towards the well-being of man and the planet.



BENEFITS

➤ BENEFITS TO SAFEGUARD THE ENVIRONMENT

The blow moulding machine installed in the Carvalhelhos plant, in addition to producing traditional PET and rPET bottles that require the application of a label, is equipped with special moulds made by SMIMEC for the stretch-blow moulding of bottles without paper or plastic labels.

It is an innovative solution that respects the environment, as it does not require the use of glue and paper or plastic labels, ensuring greater purity of the recycled PET material.

The area of the bottle reserved for the label has been eliminated by removing the ribs present in traditional solutions and, thanks to an innovative combination of reliefs and bas-reliefs on the body of the bottle, a larger space has been created used for the embossing engraving of the Águas de Carvalhelhos logo and a series of information (also in Braille) generally present on the label.

The new label-free bottle also meets the aesthetic and image objectives of the Portuguese company, as it differentiates itself on the shelves of points of sale by attracting the attention of consumers.



➤ MANAGEMENT AND CONTROL BENEFITS

The system supplied by SMI uses an advanced automation system called MotorNet System®, which ensures the constant maintenance of the optimal processing parameters during the entire production cycle, allows the direct modification of the machine settings from the operator panel, simplifies format change operations and offers the possibility of temporarily disabling one or more moulds if necessary. The Posyc® operator interface is simple and intuitive, ensuring quick parameter adjustment and facilitating routine and scheduled maintenance tasks. The EBS 8 KL ERGON stretch-blow moulder is also equipped with the latest generation of instruments to detect, monitor and compare the system's energy consumption.



➤ ENERGY – SAVING BENEFITS

The stretch-blow moulder purchased by Águas de Carvalhelhos is equipped with a system of energy-efficient thermo-reflective panels in composite ceramic material, positioned both in front and behind the lamps, which allow uniform heat distribution.

The stretch-blow moulding carousel is equipped with motorised stretch rods controlled by electronic drives, which guarantee precision in operations and energy savings (no compressed air is needed and the power consumption is lower than solutions with linear motors).

The compact design of the machine ensures significant savings on transport costs as it is easily transported in a container and quickly installed at the customer's site.



➤ PRODUCTION EFFICIENCY BENEFITS

The EBS 8 KL ERGON stretch-blow moulder is equipped with high-performance valves and low dead volumes (-50%) which ensure reduced pre-blowing and blow moulding times and better quality of the bottles produced. The blow moulding machine also adopts a series of measures capable of reducing the level of wear of the components to the benefit of production efficiency, such as the gripper handling system based on springless preform grippers/bottles equipped with desmodromic cams and plastic bearings.



➤ BENEFITS FOR OPERATOR FLEXIBILITY

Thanks to the preform feeding system equipped with adjustments by means of numerical position counters, format changeover operations are simple and fast.

Even the format change operations, to switch from the production of traditional bottles to bottles without a label, are extremely simple and fast as it is sufficient to replace the graft section in the mould.



BARROSO: RURAL HEART AND WONDERFUL KINGDOM FULL OF WATER SOURCES



The Barroso is a region located in Northern Portugal, on the border with Spain, in the province of Trás-Os-Montes and extending between the districts of Vila Real and Bragança.

It is an area rich in healthy waters and one of the most remote areas of the country, with a strong rural and community spirit.

Identified by the FAO as an area of World Heritage of Agriculture, the Barroso region was also one of the first places to have received this recognition thanks to the daily agricultural

activities, carried out in a full collaborative spirit between all the locals who share their flocks, machinery, seeds and warehouses; a social organization that has no equal in Europe. Of particular interest in this area of northern Portugal is the Biosphere Reserve, where you can breathe clean air.

Another unmissable stop is the small mountain village Boticas, famous for the “fumeiros” (smoked meat), and for the meat of the barrosa cow.

In addition to food, Boticas has an important winemaking tradition, like almost all of

northern Portugal.

Here, in fact, the “vinho dos mortos” (the wine of the dead) is prepared, a custom that dates back to the period of the second French invasion (1808) when the inhabitants of Boticas got into the habit of hiding goods in unusual places.

For example, the bottles of wine were buried and remained there until the return of the owners, who, to their surprise, were so enraptured by its taste when they tasted the wine contained in them, that the bottles are still buried today.



➤ **RECHARGE YOUR BATTERIES
WITH A HOLIDAY
IN NORTHERN PORTUGAL**

Investing in your physical and mental health is essential for overall well-being. Portugal offers a wide variety of options for you to take care of yourself, recharge your batteries and get rid of everyday stress. In first position are the wellness centers that combine the benefits of the sea and thermal waters, such as the Thermal Baths of Carvalhelhos, Chaves, Pedras Salgadas and Vidago. Located 800 meters above sea level, at the foot of a pre-Roman fort and surrounded by the lush and magnificent park of the Serras do Barroso, the Carvalhelhos Thermal Spa is appreciated for the exceptional healing properties, to the point of being called "saints". Medium-mineralized waters are suitable for restoring the body's natural balance and for treating skin diseases, as well as disorders of the digestive and circulatory systems.





➤ AVANÇO TECNICA, LDA

Professionalism and experience, gained in over 30 years of activity in the field of plants for the food, beverage and pharmaceutical industries, are undoubtedly the winning key of the company Avanço Tecnica Lda, SMI's historic partner in Portugal that ensures fast and efficient support to the numerous customers in the area, including Aguas de Carvalhelhos.

"High performance, maximum reliability, construction robustness and competitive solutions are the requests we receive from every customer who relies on our advice when they have to make a new investment" - explains Pedro Marcos, CEO of Avanço Tecnica.

"Without forgetting the importance of responding quickly to any request for assistance or availability of materials."

This is how we can summarise the main needs of bottling and packaging companies located in Portugal, which require increasingly sustainable technological solutions, product quality and long-lasting after-sales support.

Thanks to the local support of Avanço Tecnica, SMI provides both a commercial service and technical assistance to the machines installed in the area.

Commenting on the recent project carried out at the Carvalhelhos plant, Pedro Marcos said: *"We are proud to have contributed to the installation of the new EBS 8 KL ERGON stretch-blow moulder and to be able to ensure greater competitiveness to the customer for the production of the new bottles without the application of labels, an increasingly trendy solution in Portugal and in line with the Carvalhelhos' goal of meeting the needs of consumers in terms of sustainable products."*

From left to right: Fernando Macedo, maintenance manager at Carvalhelhos; Manuel Nascimento, CEO of Carvalhelhos and Pedro Marcos, Director of Avanço Tecnica.



FOUNDED IN 1993, SANT ANIOL IS A COMPANY THAT HAS BEEN WORKING CONSCIOUSLY FROM THE MOMENT THAT IT WAS ESTABLISHED TO PRESERVE THE ENVIRONMENT AND MAKE THE WORLD A BETTER PLACE TO LIVE IN. AMONG THE COUNTLESS INNOVATIONS INTRODUCED TO PURSUE THIS GOAL, THIS SPANISH COMPANY USES A SMI ROTARY STRETCH-BLOW MOULDER MODEL EBS 8 KL ERGON, FOR THE PRODUCTION OF PET BOTTLES. THIS MACHINE IS EQUIPPED WITH "REDUXAIR", A HIGH-TECH SYSTEM WHICH, THROUGH THE REDUCED USE OF COMPRESSED AIR, ENSURES A REDUCTION IN ENERGY COSTS.

SANT ANIOL



➤ **SECTOR: WATER**

SANT ANIOL

Sant Aniol de Finestres, Girona, Spain

www.santaniol.com

➤ **EBS 8 KL ERGON Rotary Stretch – Blow Moulder**



GEO LOCATION

SANT ANIOL WATER AND PROTECTION OF THE ENVIRONMENT

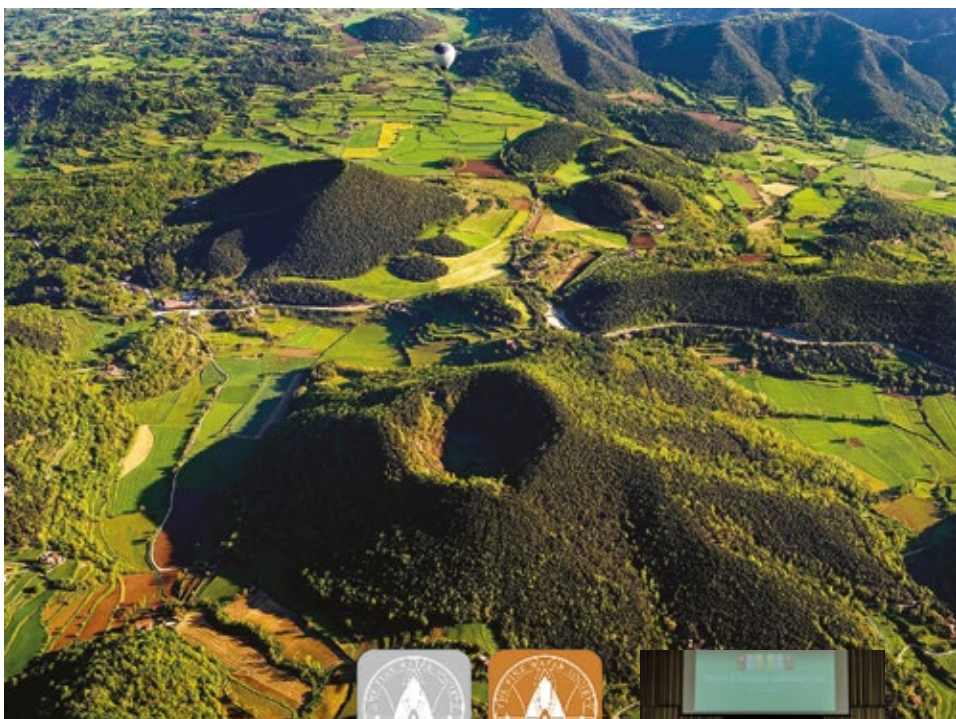
The Garrotxa region of Spain, located in the province of Girona, is well-known for its unique and impressive volcanic landscape.

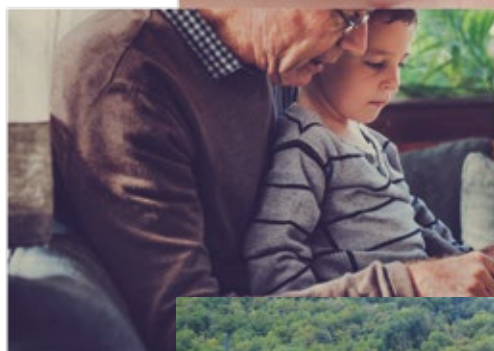
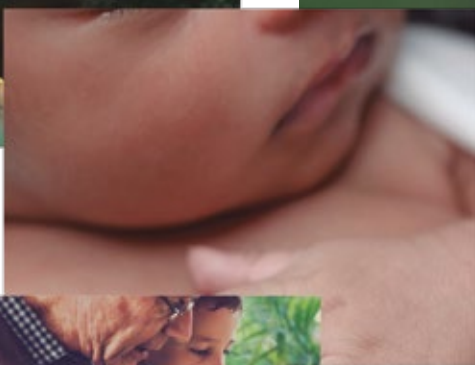
With the presence of more than 40 volcanoes, lush forests and green fields, the ecosystem of this area of Catalonia plays a crucial role in the formation of the precious Sant Aniol water, which, in 2024, won the SILVER prize for the tasting and the BRONZE prize for Design in the first edition of the "FineWaters 2024" International Water Tasting Competition organised by the Basque Culinary Center.

The award is a testament to the purity and quality coming from the volcanic environment, which promotes balanced water mineralization and highlights the Spanish company's strong commitment to excellence and environmental protection.

Sant Aniol also focuses on the optimisation and innovation of the materials used for packaging, minimising the environmental impact. Strict quality controls and the use of a production system free from human contact, are able to guarantee a contamination-free extraction and bottling process. Since 2018, the energy used in the plant has been 100% green, thanks to the creation of a 275-hectare security perimeter, the Spanish company also protects the water source from any contaminating activity.

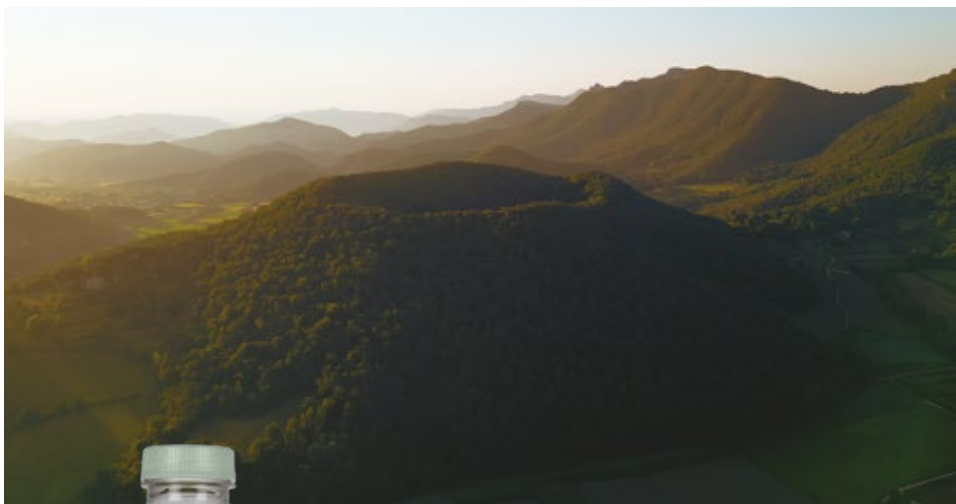
The Sant Aniol spring is located within the Garrotxa Natural Park, at a depth of more than 120 metres, in a place characterised by sedimented lava and volcanic rock that gives the water purity and excellent qualities.





BOTTLES WITH A VOLCANIC SPIRIT

Both the glass and PET bottles used by Sant Aniol have a unique, extremely elegant design, which stems from the idea of enhancing the qualities of a product that has been present in the best hotels and restaurants in over 20 countries, for over 15 years and that stands out in the points of sale. The design of the PET bottles produced by the EBS 8 KL ERGON stretch-blow moulder supplied by SMI, was born in 2015 by the Spanish artist and designer Martín Azúa, who created a special bottle for Sant Aniol, the surface of which, is inspired by the rocks of the volcanic stone of Garrotxa, where the water has its source.



WHO IS MARTIN AZÚA

Martín Ruiz de Azúa (Martín Azúa) is a Spanish designer born in the Basque Country in 1961; he trained at the Academy of Fine Arts in Barcelona and his works are part of important collections and museums such as the MOMA in New York.

He is a passionate observer of nature, which he incorporates into a lot of his works, especially in the ceramic objects he designs.

Martín Azúa states that design is important to the extent that it improves the relationship of each individual with the environment, ennobles people's work and the materials used in production.

**THE DESIGN OF THE PET BOTTLE LOOKS LIKE A JEWEL
OR A PERFUME BOTTLE.**

**IT IS PRODUCED WITH VERY REASONABLE RESOURCES,
BECAUSE SAVING EVEN JUST A FEW GRAMS OF MATERIAL
IS VERY IMPORTANT FOR THE ENVIRONMENT.**



SMI SOLUTIONS

FOR SANT ANIOL



Companies in the food sector, are now strongly committed to the green and digital transition and put the well-being of consumers and workers at the center of their production processes.

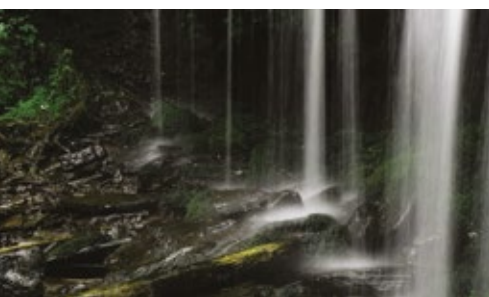
For Sant Aniol, the environment is a primary asset to be safeguarded and, to achieve this goal, the company uses the latest generation technologies capable of maximising energy savings.

15 years after the supply of an SMI stretch-blow moulder of the first generation SR 8 series, Sant Aniol has once again turned to SMI for the installation of the new EBS 8 KL ERGON model, intended for the bottling line of natural water in 0.33 L, 0.5 L and 1.5 L PET containers.

The great advantage of the new plant installed at the Sant Aniol de Finestres plant (Girona) is that it has an efficient system to significantly reduce energy costs.

The EBS 8 KL ERGON purchased by the Spanish company uses moulds equipped with the "ReduxAir" system, an innovative solution that allows stretch-blow moulding operations to be carried out at lower pressures than those traditionally used. Depending on the characteristics of the preform, the bottle and the working conditions, 15-20 bar is sufficient compared to the 30-35 normally used in this process.

This makes it possible to reduce the use of the high-pressure air compressor, with a consequent reduction in electricity consumption.



➤ EBS 8 KL ERGON ROTARY STRETCH – BLOW MOULDER

Functions: stretch-blow moulding of PET bottles of natural water at a maximum speed of 16,000 bottles/hour.

Bottles worked: 0.33 L, 0.5 L and 1.5 L cylindrical containers.

Main features

- the SMI stretch-blow moulder adopts solutions that ensure energy saving, such as the “ReduxAir” mould and the “AirMaster” air recovery system
- a plant suitable for the production of lightweight PET containers, which, through an appealing design, reflect the uniqueness of bottled water, promote the brand and minimise environmental impact
- compact, automated plant equipped with digital intelligence that meets the needs of efficient production and constant monitoring of machine consumption.



➤ ENERGY - SAVING BENEFITS

The EBS 8 KL ERGON stretch-blow moulder is characterised by the presence of an innovative preform heating oven that is extremely compact and equipped with an aluminium diffuser that ensures optimal temperature control to prevent overheating. The energy costs for the production of bottles are also reduced thanks to the presence of energy-efficient IR lamps and heat-reflecting panels equipped with ceramic elements. The stretch-blow moulding module is equipped with a high-efficiency two-stage air recovery system, called AirMaster, which recovers the air from the blowing circuit and thus ensures a significant reduction in compressed air consumption and significant energy savings, thanks to the reduced use of the high-pressure compressor.



➤ BENEFITS FOR ENERGY EFFICIENCY

The EBS KL ERGON stretch-blow moulder supplied to Sant Aniol, is equipped with an energy meter equipped with a digital LCD display, which, through the monitoring of energy consumption, allows the operational efficiency of the plant to be optimised. The meter installed on the machine is used to record and display electricity consumption, voltage, current, and power alternately over a given period. Thanks to these devices, SMI machines can benefit from the services offered by the SMYIOT platform, an interactive database that remotely collects, verifies, processes and enhances all the operating parameters of the plant, both at the level of the individual machine and of the entire production line, in order to improve operational efficiency and energy performance, schedule maintenance interventions and reduce production costs overall.



➤ BENEFITS TO SAFEGUARD THE ENVIRONMENT

The solution developed by SMI to reduce the pressure of the blowing air used in the production process of PET bottles perfectly responds to Sant Aniol's goal of having technologies that minimize the impact on the environment, thanks to lower electricity consumption by the compressor, savings on energy costs and consequent less air pollution.

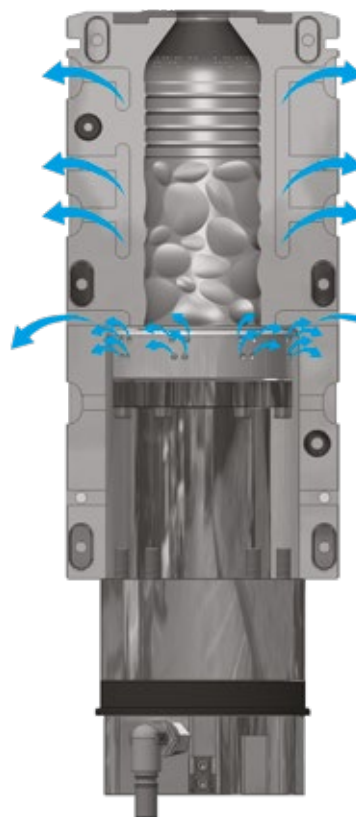
The EBS 8 KL ERGON stretch-blow moulder installed at the Girona plant is fitted with stretch-blow moulds equipped with the special "ReduxAir" bottom, which, through special technical and design measures, allows the air between the outer walls of the bottle and the surface of the mould to be released much faster, making it possible to produce rPET/PET containers with lower air pressures. especially:

- 0.33 L containers with air pressure at 15 bar
- 0.5 L containers with air pressure at 17 bar
- 1.5 L containers with air pressure at 25 bar

Of course, this value depends on the characteristics of the preform and the bottle and the working conditions in which the stretch-blow moulding process is carried out.

As it is well known, compressed air is produced by a high-pressure compressor powered by electricity, so the lower the level of air compression to be obtained, the less electricity the machine consumes. The special "ReduxAir" end cap was precisely created to allow stretch-blow moulding operations at lower pressures than those usually used (about 35 bar) and to ensure a green advantage to the companies that adopt it.

BELOW: QUICK RELEASE PATTERN
OF COMPRESSED AIR WITH THE
SPECIAL REDUXAIR END CAP



ACCURATE QUALITY CONTROLS ON MOULDS AND BOTTLES

The great advantage offered by the "ReduxAir" solution proposed by SMI to reduce the compressor's consumption of electricity can be obtained by applying some design restrictions regarding the shape and characteristics of the container to be blown.

Therefore, close collaboration between the customer and SMI engineers is essential to evaluate all the technical elements that may affect the applicability of the "ReduxAir" end cap to the production process of a specific bottle and offer advice on how to achieve the highest quality of the container.

In fact, the appeal of a container also depends

on the accuracy and precision, with which the moulds used to produce it are made.

Therefore, countless tests and checks are carried out on both moulds and bottles in SMI laboratories to ensure excellent aesthetic results and ensure an efficient production process.

The use of sophisticated equipment allows us to perform dimensional checks and tests on the preforms used by the customer, in order to accurately measure the thickness of the same and the homogeneity of the polymer of which they are made.

SMI also performs other tests on blown bottles to ensure that the quality of the final product corresponds to the customer's expectations.



➤ SAVE ENERGY WITH THE AIRMASTER AIR RECOVERY SYSTEM

The AirMaster air recovery system consists of two systems. The first basic system allows you to recover the air that is then used for the pre-blowing and service phase of the machine. Two valves are mounted on each stretch-blow moulding station: the first feeds the recovery system, introducing air into the line of the same, while the second discharges the air that cannot be recovered. In addition, the recovered air is taken to feed the machine's pre-blowing and service circuit. The working pressure of the pre-blowing and service circuit is managed by two electronic regulators. The second air recovery system complements the first and guarantees further savings in compressed air, because it takes part of the exhaust air and uses it exclusively for the blowing phase. Under certain working conditions, the AirMaster is able to enable reductions in compressed air consumption of up to 30%.



GARROTXA NATURAL PARK



IF YOU ARE EAGER TO DISCOVER AN AREA WHOSE VOLCANIC ORIGIN HAS CREATED A UNIQUE NATURAL SPECTACLE AND GIVEN THE TERRITORY FERTILITY AND BIOLOGICAL RICHNESS, THEN YOU MUST PAY A VISIT TO THE COLORFUL NATURAL PARK OF THE GARROTXA VOLCANIC ZONE.

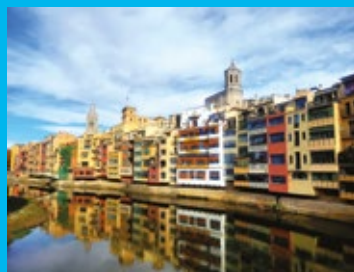
The Park, located in the province of Girona, in the north-east of Catalonia, has 26 nature reserves and represents the largest and best preserved volcanic area of the Iberian Peninsula, of great botanical and geological interest. The area has as many as 40 inactive volcanic cones, the most emblematic of which are those of Santa Margarida, Montsacopa and Croscat, the latter being the largest and youngest in Spain. The last eruptive episode occurred about 11,500 years ago, these lava flows helped make the plains and valleys fertile. Today, an extremely varied flora and fauna co-

exist in the Garrotxa park, which make it possible to enjoy countless outdoor activities to explore the beauty of a unique area, but the Park is not just nature, it contains a first-rate historical and cultural heritage, with churches and castles, rural areas with farmhouses, ancient medieval nuclei and Romanesque monuments, modernist buildings and the interesting Volcano Museum. The vegetation is rich and varied, with a predominance of holm oak, oak and beech woods. There are also chestnut, hazelnut, alder, poplar and boxwood. The fauna is made up of species such as wild boar, wild cat, dormouse, stone marten and genet.

➤ **A JOURNEY THROUGH TIME TO DISCOVER GIRONA**

The city of Girona is suspended between the sea and the mountains, protected by the Pyrenees that dominate and overlook the territory. Its strategic position has made it a coveted prey for different peoples and cultures. The many dominations that Girona has suffered have created a territory rich in history and interesting contrasts, since the city is of Roman origin and boasts excellent examples of medieval, Romanesque,

Gothic and modernist architecture; For these reasons, walking through the historic center is like traveling through time. Another geographical peculiarity of the place is related to water: Girona is in fact located at the confluence of four rivers: Onyar, Güell, Galligants and Ter, the so-called "Pla de Girona", or Plain of Girona. The city is also the capital of one of Catalonia's most sensational destinations: the Costa Brava!



CONDIMENTS HAVE THE POWER TO TRANSFORM SOMETIMES BLAND DISHES, INTO DISHES WITH A BRIGHTER TASTE. THIS IS WHAT HAPPENS, FOR EXAMPLE, WITH TOMATO SAUCE, A CONDIMENT THAT IS INCREASINGLY FASHIONABLE AND LOVED BY YOUNG PEOPLE, WHOSE CONSUMPTION HAS BEEN GROWING STEADILY FOR MANY YEARS. THIS TREND CAN ALSO BE SEEN IN VENEZUELA, WHERE THE COMPANY EMPRESAS POLAR, BASED IN CARACAS, FOR THE SECONDARY PACKAGING OF PAMPERO BRAND TOMATO SAUCE GLASS BOTTLES, HAS RECENTLY TURNED TO SMI FOR THE INSTALLATION OF A NEW CSK 40 T ERGON T ERGON SHRINK WRAPPER FOR THE MODERN PLANT IN VALENCIA, IN THE STATE OF CARABOBO.

➤ **SECTOR FOOD**

EMPRESAS POLAR

Caracas, Venezuela

➤ Shrink wrapper CSK 40 T ERGON

➤ Conveyors





EMPRESAS POLAR

INVESTING TO SATISFY A GROWING MARKET

To meet the demands of an ever-growing market, increasingly demanding in terms of quality and safety, Empresas Polar, one of the leading food companies in Venezuela invests in extremely versatile and innovative production processes and systems. To keep up with changing consumer demands, the Caracas-based company must in fact equip itself with machinery that ensures operational flexibility of the plants and advanced automation of production processes. The CSK 40 T ERGON automatic packaging machine supplied by SMI is the ideal solution for packaging Pampero brand glass ketchup and tomato paste bottles, in practical bundles with tray and shrink film, a practical, appealing packaging that is highly appreciated by consumers.

→ QUALITY, PRACTICALITY AND FLEXIBILITY

Empresas Polar is particularly attentive to the level of quality of its products, eco-sustainability, safety and efficiency of the systems and the reduction of management and maintenance costs of the operating structures. Starting from these needs and from the request of the Caracas company to package the glass ketchup bottles in practical and resistant bundles with tray and shrink film, SMI's designers proposed a shrink wrapper from the CSK ERGON series, a versatile and efficient packaging solution, together with the handling systems for incoming bulk bottles and outgoing packs.

The CSK ERGON series is the ideal solution for the automatic packaging of food products in different formats and methods; the model installed at the Valencia plant packs 198 g and 397 g glass containers in 6x4 tray + film bundles and is prepared for the future packaging of the larger 567 g and 1000 g bottles in 4x3 and 3x2 formats respectively, always with tray + film. The tray support is the most suitable choice for glass bottles, as it ensures greater robustness and practicality of the package both during palletizing and during handling and storage in stores.

Empresas Polar's decision to invest in the purchase of a new packaging machine revolves around the need to increase the performance of the current Pampero ketchup production line; the machine model supplied by SMI ensures high flexibility and automation of production processes, fundamental factors for responding promptly to market demands. In addition, the compactness of the CSK series ensures optimal use of existing logistics space and easy use by operators during plant operation and maintenance activities.

These characteristics have already been widely tested and appreciated by the Venezuelan company since 2009, the year in which SMI supplied Empresas Polar with a shrink wrapper from the LSK ERGON series, together with a DV 500 ERGON model divider, for the packaging of Rikesa brand spreadable cheese.

EMPRESAS POLAR

Empresas Polar is a Venezuelan company that, through its subsidiaries Alimentos Polar, Cervecería Polar and Pepsi-Cola Venezuela, operates in the food, alcoholic and non-alcoholic beverages sectors. This industrial reality currently holds a leadership position in the food & beverage sector and is one of the most important entrepreneurial structures in Latin America.

The birth of Empresas Polar dates back to 1941, when Lorenzo Alejandro Mendoza Fleury founded the Cervecería Polar company in Caracas, specialized in the marketing of beer and malt.

In 1954 the company Productos Remavenca was born, with the aim of producing maize, the raw material necessary for the production of Polar beer. Over the years, the Venezuelan group has expanded its range significantly, ranging from "Las Llaves" detergents to pet

food, from powdered soft drinks to "P.A.N." precooked flour, from maize oil to rice and pasta, and then yoghurt, tuna, sauces and spreads and, of course, the inevitable tomato sauce and ketchup under the Pampero brand.

Pepsi-Cola Venezuela also belongs to Empresas Polar which specialises in the production and marketing of a wide portfolio of products: Pepsi, Pepsi Light, 7up, Golden Sabores, Agua Mineral Minalba, Gatorade, Jugos Yukery and others.

ISA GROUP CA

The success of the new CSK ERGON packaging machine project in Empresas Polar was confirmation of the importance of close collaboration between the customer, SMI and the local partner ISA Group CA, which is based in Caracas.

The professionalism and experience of ISA Group, a company managed by Roberto Cavallini, are fundamental factors in ensuring an efficient service to Venezuelan customers such as Empresas Polar, who are supported in choosing the optimal technological solution to increase the performance of their production plants.

The primary objective of SMI and the local partner is total customer satisfaction, for which since 2005 ISA Group has also activated a technical assistance department that ensures timely support for breakdowns, maintenance, spare parts, etc.



THE ORIGINS OF KETCHUP AND THE TOMATO VARIANT

The ancestor of modern ketchup was tomato-free; although it is often considered a US product, ketchup actually has oriental origins. In fact, it is thought that the term "ketchup" derives from Chinese ideograms that mean "brine/juice" of "salmon/fish". The original recipe of the product was in fact based on fermented fish and not tomato. The Chinese spread it to Southeast Asia, where it entered the Malay language as "kecap" or "kicap", and

then switched to the English language as "ketchup".

When this sauce landed in Europe in the seventeenth century, cooks began to devise variations using different ingredients, including oysters, mushrooms, walnuts and lemon. The modern ketchup recipe began to develop at the end of the eighteenth century in the United States, when some cooks began to use tomatoes in the production of this condiment.



THE KETCHUP MARKET IN THE WORLD

THE INCREASING CHANGE IN EATING HABITS, THE AVAILABILITY OF CHOICE OF TASTE, AND MODERN LIFESTYLES ARE THE MAIN FACTORS DRIVING THE GROWTH OF THE MARKET FOR TOMATO KETCHUP SAUCE, A CONDIMENT OFTEN USED IN COMBINATION WITH A RANGE OF FOODS (E.G. CHIPS, SANDWICHES AND BURGERS) WHICH, IN SOME COUNTRIES, IS A CONVENIENT SUBSTITUTE FOR SAUCE AND OTHER CONDIMENTS. GLOBALLY, THE KETCHUP SECTOR CURRENTLY GENERATES A TURNOVER OF ABOUT 40 BILLION USD AND IS EXPECTED TO GROW BY ABOUT 4% PER YEAR FROM 2025 TO 2029.





SMI SOLUTIONS

FOR EMPRESAS POLAR

For the packaging process of Pampero brand ketchup bottles, Empresas Polar relied on the experience of SMI, with which it had already collaborated in 2009 for the supply of a packaging machine for Rikesa brand spreadable cheese jars.

The CSK 40 T ERGON series shrink wrapper, recently installed in the Venezuelan company's Valencia plant, is the ideal solution for tray + film packaging of glass ketchup bottles and stands out for its operational flexibility and ease of format changeover.

The choice of this model appeared to be the most suitable solution to optimize the end-of-line secondary packaging process, thanks to specific features such as advanced automation, versatility of use, low energy consumption and respect for the environment.



➤ PACKER CSK 40 T ERGON

Products packed: 198g and 397g ketchup glass bottles (567g and 1000g future bottles).

Packs made: 6x4 packs in tray + film for 198 g and 397 g bottles; Future 567g bottles will be packed in the 4x3 tray + film format and the 1000g bottles in 3x2 tray + film.

Key features:

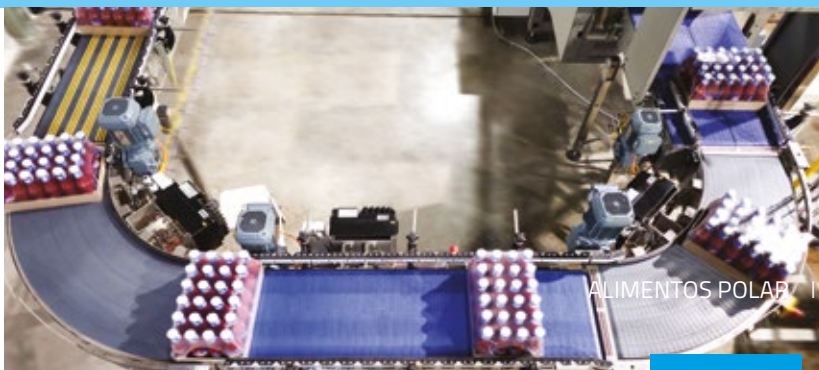
- compact and ergonomic design
- carton magazine positioned under the infeed belt, from where the cardboard blanks are picked up by means of an alternating movement sheeter consisting of a group of suction cups with a vacuum suction system
- curvilinear cardboard climbing in the initial and final section, to facilitate the insertion of the cardboard pad
- very smooth product infeed system for easy channeling of loose bottles on the conveyor belt equipped with thermoplastic chains with low friction coefficient
- grouping of bulk containers in the desired format continuously
- film cutting unit with a compact design, with high-precision film cutting operations thanks to the brushless "direct-drive" motor
- simplified maintenance operations thanks to the ergonomic design of the machine
- SMITEC ICOS motors equipped with integrated digital servo-drive (driver), able to simplify the wiring of the machine and ensure greater energy efficiency, less noise and reduced wear of the components
- the model installed at Empresas Polar mounts an optional additional 1,150 mm belt, positioned at the exit of the tunnel, for a rapid cooling of the packages and better aesthetic quality of the package itself
- machine supplied with other optional devices, such as the output product stabiliser and the bottle presence verification system installed upstream.

➤ CONVEYORS

Function: handling of loose glass ketchup bottles entering the CSK 40 T ERGON shrink wrapper and of tray + film packs leaving the same.

Key features:

- smooth handling of loose bottles and tray+film packs
- simple and intuitive human-machine interface
- simplified maintenance
- reduced format changeover times for the transition from one production to another.







CARACAS

THE CITY OF ETERNAL SPRING



Caracas, thanks also to its long history of domination and freedom, is one of the most fascinating places in South America, where in the space of a few blocks you go from unspoiled nature to the chaos of a large metropolis and from the opulence of very high skyscrapers to the precariousness of the poorest areas. The discovery of the capital of Venezuela, which has about 9 million inhabitants within the metropolitan area, can only start from the "Candelaria", the oldest and most famous district of the city for the high concentration of imposing historical architecture and cultural sites that

can be reached along long cobbled streets. Here, for example, stands the Museo de Bellas Artes, flanked by numerous churches and civic structures such as the Panteón Nacional and the Teresa Carreño Theater.

There are also long queues of shops for shopping, art galleries dedicated to local contemporary artists, cafes and restaurants offering typical dishes cooked according to the most ancient traditions as part of a gastronomic offer that is always of a high standard.

Caracas is also an excellent destination to seek contact with the lush nature of South America, thanks to the presence of large parks; the city is in fact located within a valley belonging to the

Venezuelan coast cordillera system, separated from the central coast by the Waraira Repano national park (called Parque Nacional El Ávila until 2011).

Other important parks include Parque Los Chorros, important for its scenic waterfalls, and Parque del Est, an ideal destination for outdoor excursions through forests and artificial lakes. By virtue of its status as the capital of Venezuela, Caracas is home to the institutions in charge of state administration and numerous service companies such as banks, shopping malls and hotels, which make the tertiary sector the main voice of the city's economy.



PACKAGING GIVES VALUE TO PRODUCTS THANKS TO ECO-SUSTAINABLE SOLUTIONS

Sensitivity to the environment is a factor that pushes more and more consumers to make responsible purchasing choices, focused on products and brands that concretely demonstrate their green vocation and that use, among other things, eco-friendly packaging solutions.

For many companies in the food and beverage industry, packaging is just as

important as the product, adding to the four P's of the marketing mix: product, price, promotion and place.

The importance of packaging has taken on an even wider value in recent years, since the latter from post-use waste is able to turn into a resource, living a second life through both reuse and recycling.

Sustainable packaging is packaging developed and manufactured in such a way as to reduce the environmental impact and carbon footprint of operators in the sector, without losing sight of the original functions of protecting products, informing about their characteristics and attracting the consumer's attention at the points of sale.

In addition, captivating packaging solutions are often the basis of highly successful brand marketing campaigns, especially if these are focused on particularly current issues such as corporate social responsibility or on emotional experiences and "storytelling" in the "unboxing" phase (package opening videos are among the most clicked on social media, from Instagram to Tik Tok).



➤ BECOMING SUSTAINABLE

The key points for improving packaging solutions from a sustainable perspective can be summarised as follows:

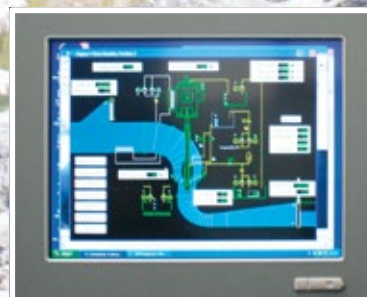
- use recyclable and/or recycled materials
- use innovative materials
- reduce the weight and volume of packages without compromising product protection and hygiene
- rely on a sustainable supply chain
- reinvent the concept of packaging in anticipation of reuse.

THE SMI GROUP & ENVIRONMENTAL PROTECTION

The SMI Group's commitment to sustainability goes beyond the supply of machines and systems that ensure customers the creation of environmentally friendly packaging solutions.

The company has been engaged for years in expansion and redevelopment projects of its production plants (both at SMI's headquarters in San Giovanni Bianco in Italy, and at all the other companies of the Group), adopting innovative solutions capable of minimizing the carbon footprint of the industrial activities that take place within them.

By way of example, the solutions adopted by the SMI Group include the photovoltaic roofing of the components production and machine assembly plants, the construction of a solar-thermal system for heating the water used in the company's services and the presence of a hydroelectric power plant, within the main plant, which produces green energy from the waters of the Brembo river.



PAPER OR PLASTIC?

SOLUTIONS THAT ANSWER THE BIG QUESTION OF THE MARKET

IN THE PATH OF ECOLOGICAL TRANSITION TOWARDS THE GREATER USE OF ECO-FRIENDLY PACKAGING, OPERATORS IN THE FOOD & BEVERAGES SECTOR ARE GRAPPLING WITH FACTORS OF GREAT IMPORTANCE SUCH AS THE REGULATIONS TO BE FOLLOWED, BUSINESS RESILIENCE AND CONSUMER NEEDS; ALL ASPECTS THAT REQUIRE CONTINUOUS INVESTMENTS WITHIN THE PRODUCTION DEPARTMENTS OF COMPANIES OF ALL SIZES TO EQUIP THEMSELVES WITH APPROPRIATE MACHINES AND SYSTEMS.



SMI constantly invests in R&D activities to offer a wide range of machinery capable of processing green materials: recycled shrink film, rPET, corrugated cardboard or light kraft cardboard.

Depending on their production, marketing, storage or transport needs, every business in the sector can now choose the most suitable packaging solution between paper and plastic, i.e. between the two most widely used materials.

In recent years, issues related to the use of plastic, and especially its post-use disposal, have become increasingly debated topics at all levels, especially following documentaries, analyses and research that have highlighted the impact of plastic on the oceans.

The strong media impact of such discussions has led many companies to look for alternative packaging solutions to plastic, opting for materials such as corrugated cardboard or kraft cardboard.

In reality, this trend has been mainly dictated by the need to intercept the increased sensitivity of consumers to these issues, since accurate studies on the production, disposal and recycling processes of paper and plastic show that both materials have a very similar impact on the environment, much less than in the past thanks to the new technologies for recyclability introduced in the sector in the last decade.



smi
now



RESPECT THE ENVIRONMENT BY CHOOSING PAPER

Paper packaging is commonly labeled as sustainable, as it is produced from renewable raw material derived from wood, and is easily biodegradable and recyclable. The optimal solution for sustainable management is to choose FSC (Forest Stewardship Council) or PEFC (Programme for the Endorsement of Forest Certification) certified raw material. There are different types of paper and cardboard used in the packaging sector; Among them, lightweight kraft cardboard is growing strongly among operators who aim for packaging solutions that make sustainability a strength, thanks

to the lower amount of material used in packaging.

The features that distinguish this type of packaging are:

- **resistance:** protects bottles or more delicate products while on the move. The German term “kraft” means “resistance, strength”
- **aesthetics:** it offers the possibility of using impactful graphics and printing QR codes and personalized information
- **rapid biodegradability** and a fairly simple manufacturing process

- **savings:** it can have different weights, allowing you to save on material. Further savings are possible by making minimal packages (such as the top pad).

By contrast, paper and cardboard packages require a significant amount of energy to produce; On the other hand, the production of recycled material requires up to 60% less energy and up to 70% less water than virgin material. However, paper and cardboard can be recycled for a maximum of 5-7 times, as their fibers lose in length and quality with each process, making it necessary to constantly add new wood fibers .



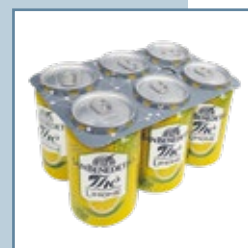
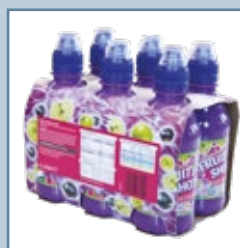
SMI SOLUTIONS FOR ECO-SUSTAINABLE PAPER PACKAGING

➤ KRAFT CARDBOARD

The main advantages are that it is possible to create resistant and lighter packaging, using less material, and consequently save on the production and purchase costs of cardboard.

Kraft cardboard packages can be made using the following SMI machines :

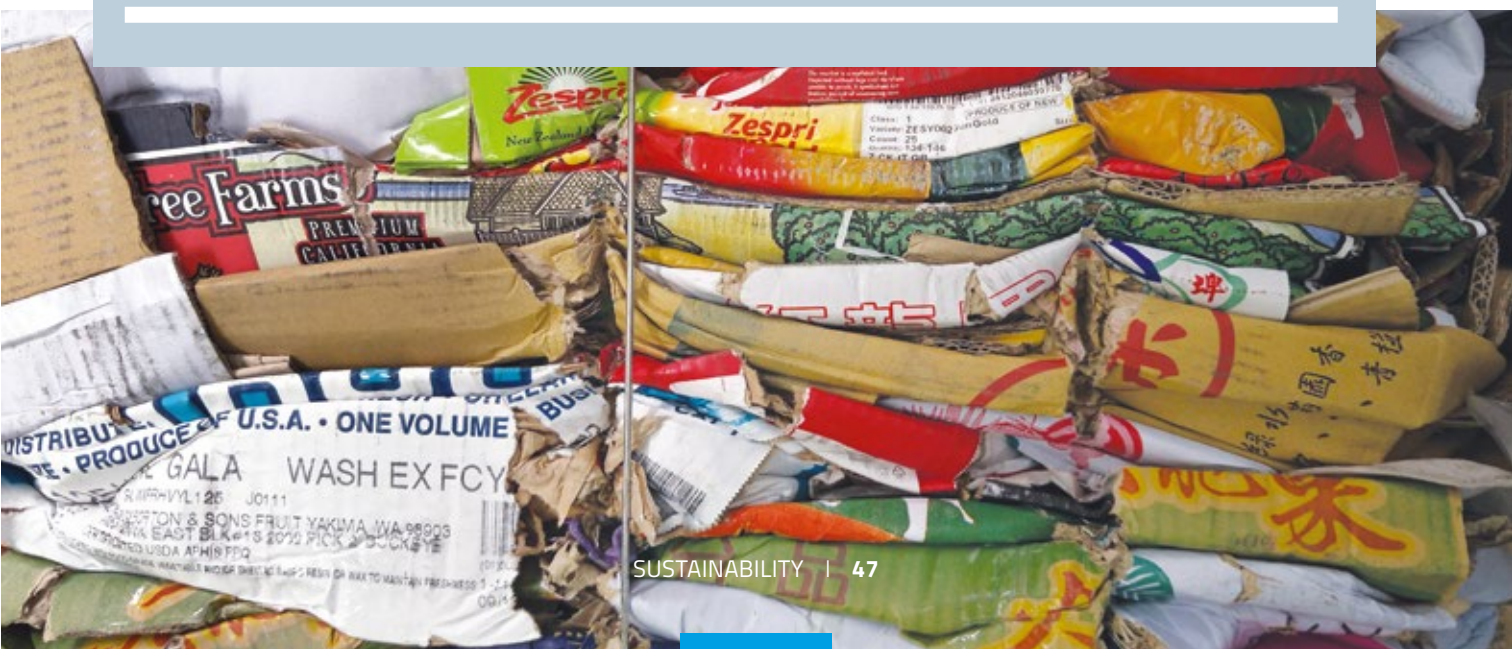
- WP series wrap-around case packers and CM series combined machines to obtain a completely closed box
- multipack packaging machines of the MP and TPP series to produce packs in wrap-around cardboard bands for products with neck in (OTT) or neck out (NT) or packs with top flap of cardboard.



➤ ARCWISE® CARDBOARD

Thanks to the special bevelled design that distinguishes it, this package offers the advantage of being able to reduce the amount of material used by about 30% compared to a traditional box; In addition, the perfect adherence of the package to the packaged product guarantees greater strength. Arcwise® paperboard developed by the Swedish company SCA Forest Products uses a raw material entirely derived from renewable sources.

- This type of cardboard can be used on the wrap-around case packers of the WP series and on the combined machines of the CM series.



RESPECT THE ENVIRONMENT BY CHOOSING PLASTIC

Plastic packaging has excellent protective properties and can be recycled, in theory an unlimited number of times. Compared to paper, plastics require less energy in both production and recycling processes.

The features that distinguish this type of packaging are :

- **impermeability:** a fundamental factor in preserving food and avoiding waste
- **resistance** during the transport and storage phases of the packages
- **aesthetics:** for example, the neutral film allows you to easily identify the products inside while the printed one enhances them
- **savings:** with the same technical characteristics, it is common to use film

reels with a lower thickness, to reduce the energy consumption of shrink wrapping

On the other hand, the raw material is obtained from oil, a limited and non-renewable resource, and is not biodegradable; for these reasons, it is important to choose packaging made of 100% post-consumer recycled PET (so-called rPET). It is in fact important to distinguish between recyclable plastic and recycled plastic: the former is composed of virgin material, just introduced into the production cycle, while the latter is material from recycled sources, therefore already used in previous productions, collected and reused.

From a sustainability perspective, the latter is undoubtedly preferable.



SMI SOLUTIONS FOR ECO-SUSTAINABLE PLASTIC PACKAGING

➤ RECYCLED FILM

This material reduces the production and dispersion of virgin plastic material and can be used with the following SMI machines :

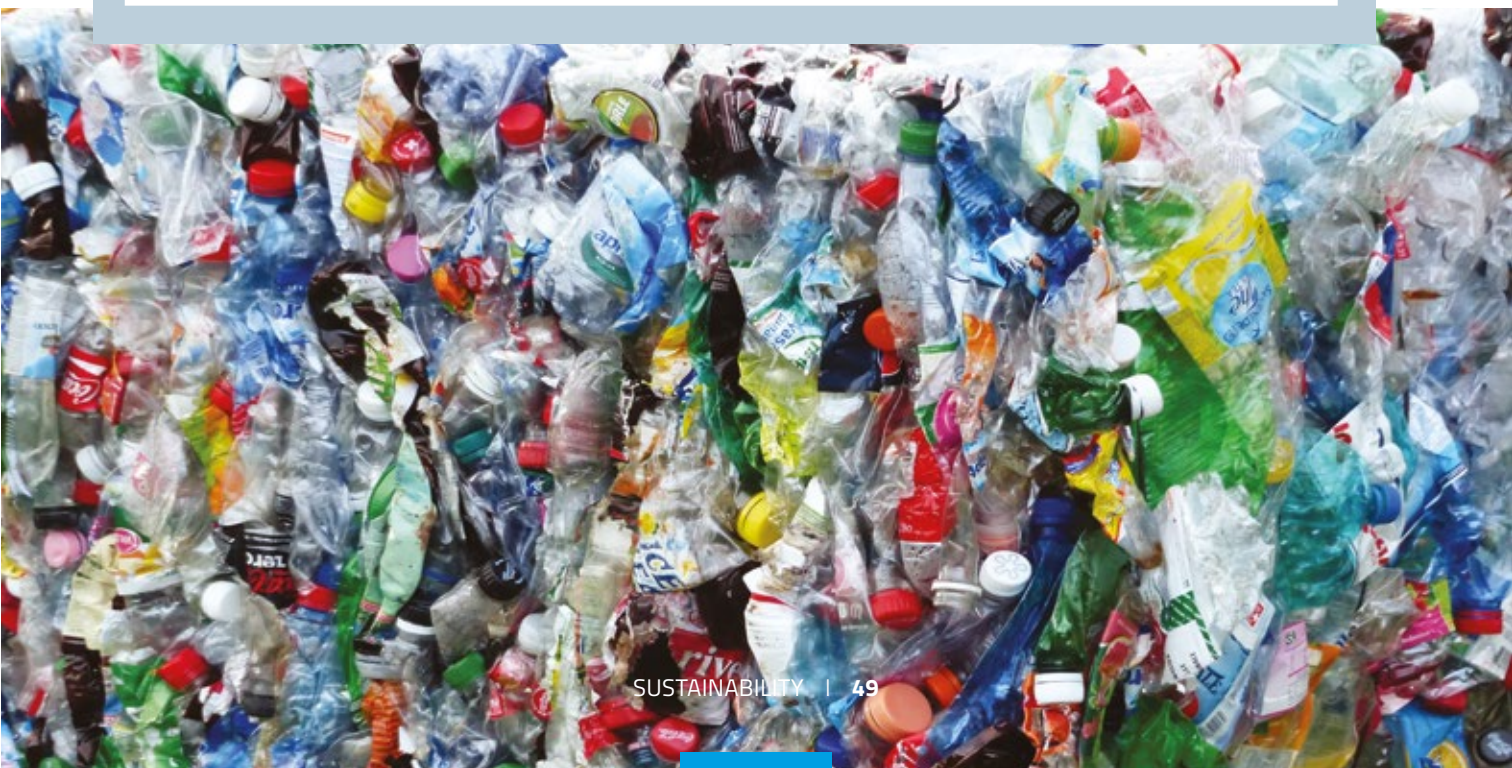
- automatic shrink wrapping machines of the LSK, CSK, SK and ASW series
- combined shrink film + carton box packaging machines of the LCM, CM and AFCW series.



➤ STRETCH FILM

The stretch film allows you to reduce energy consumption during the packaging process for film-only packaging thanks to the elimination of the shrink tunnel.

- It is used to make packs on SMI SFP series packaging machines.



POSYC 5.0

THE HMI CHANGES LOOK

POSYC 5.0 is the new entry in the range of industrial panel PCs designed and manufactured by SMITEC, the SMI Group company specialized in the development of integrated electronic devices and systems for the automation of industrial machines. Continuous investments in research and development have led the company to the launch of the POSYC® 5.0 industrial panel PC, available in three versions of 7, 10 and 18.5 inches, which has a renewed aesthetic and introduces a series of easy-to-use features for the operator. With an attractively designed frame and a display with capacitive touchscreen, the new SMITEC operator terminal

introduces the typical appeal of mobile devices to companies to meet the needs of increasingly intelligent production lines. It is a highly reliable product with long-lasting performance, since it is made of unique cast aluminum with IP65 protection. Equipped with ARM and X86 multi-core processors, the POSYC® 5.0 will be able to handle a wide range of applications in the industrial field, while the possibility of 30m video remote control will make the system even more rugged, with the CPU housed inside the electrical panel of the machine. The only display exposed to the factory environment.



MINI ICOS

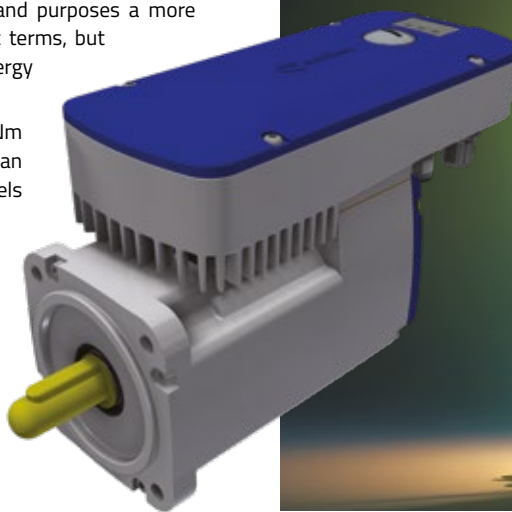
INTEGRATED DIGITAL SERVO DRIVES

SMITEC EXPANDS THE RANGE OF EXISTING DIGITAL SERVO-DRIVES BY OFFERING EVEN MORE CUSTOMIZED AND ENERGY-SAVING SOLUTIONS.

The new Mini-ICOS are designed to handle simple applications and are characterized by an innovative design, suitable for the small size of the motor, representing to all intents and purposes a more convenient solution not only in economic terms, but also for the optimization of space and energy savings.

The new ICOS servo drive features a 0.5Nm motor suitable for simpler applications than larger drives; in addition, the new models communicate via real-time fieldbus and are available with FLXIO™ interface and related Sercos III gateway™, Ethercat and Modbus TCP, to integrate perfectly with existing systems.

The new ICOS can be installed as an alternative to DC motors in all those situations where it is essential to ensure the longevity, reliability and efficiency of the systems.



➔ KEY BENEFITS

- brushless motor with on-board drive
- extremely compact solution
- resulting in reduced space in the panel and simplified wiring
- high reliability and high performance
- excellent motor thanks to real-time fieldbus
- specific parameterisation
- advanced diagnostics
- eco-friendly solution
- compatible with previous versions



APS 620

USER-FRIENDLY CONTROL AND MANAGEMENT OF MINIPALS

The SMI palletizers of the APS 615 series (semi-automatic version) and APS 620 (automatic version), specially designed for medium-low production needs (respectively of 15 and 20 packs per minute), offer all the advantages of an extremely compact and flexible system, which allows users to automate end-of-line operations in an efficient and

economical way, with the possibility of quickly and easily adapting productions according to market needs.

This is easily achieved through the use of an integrated 7" and 10" POSYC® control panel; it is a logic unit based on an ARM (Advanced RISC Machine) processor and equipped with a color graphic display, sensitive to touch and capable of advanced diagnostic and technical support functions.



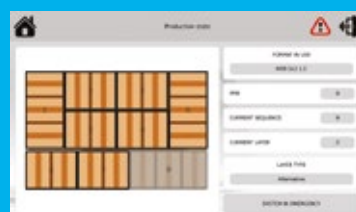
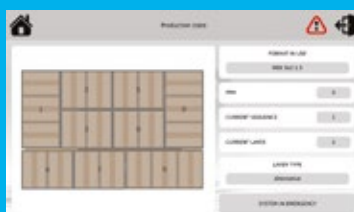
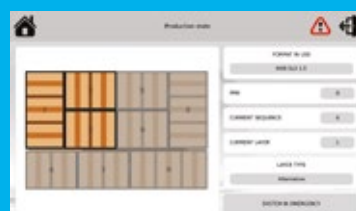
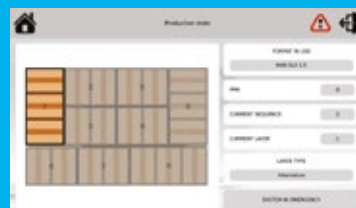


Specially designed for process control, with realtime functionality and an extremely intuitive human-machine interface, the new SMITEC control panel offers several advantages:

- constant maintenance of the control parameters during the entire production cycle
- direct modification of machine parameters, with the possibility of storing up to 30 different formats
- ease and speed of use and maintenance
- fast format changeover
- easy to save installation parameters.

➤ FOCUS ON THE PRODUCTION STATUS PAGE

Among the various functions of the POSYC®, the page called "Production status" is particularly useful to the operator, which is displayed independently when the machine enters production or through the appropriate button "View data > Production status". As shown in the images on the side, the page shows the operator all the main operating information of the palletizer (Format in use, Packs per minute, Current sequence, Current layer, Type of layer being processed, Machine Status). The operator also has the ability to view in real time the formation of the pack layer on the pallet and the palletising sequence being processed.



SMI MAKINA TÜRKİYE

SMI STRENGTHENS ITS PRESENCE IN TURKEY

SMI has recently opened a new branch in Istanbul, Turkey, thus consolidating its presence in a constantly growing market; more precisely, the offices of the new facility are located on the Asian side of the city, in the Maltepe district, just a few minutes from Istanbul-Sabiha Gökçen International Airport. SMI boasts a fleet of over 300 machines in Turkey, installed in leading bottling and packaging companies; For this reason, it has become a priority to use a local structure to provide a better and faster service to the many existing and future customers. In addition to Murat Yeşiltepe, branch manager, the staff of the new company SMI MAKINA SANAYİ VE TİCARET ANONİM ŞİRKETİ (in short SMI MAKINA TÜRKİYE) also includes Erol Könuç, sales manager; in addition, the newborn company continues its collaboration with Zafer Özcan, which has been offering valuable commercial support to SMI's local customers for years.



A CHAT WITH MURAT YEŞİLLETEN, DIRECTOR OF SMI MAKİNA TÜRKİYE



Q: What are the main demands of the Turkish market?

A: Turkey is a rapidly evolving market. Although there has been a slowdown in the birth rate in recent years, the population is still growing at a fast pace, especially due to the presence of a growing number of refugees from countries at war who are hosted on the national territory. All these factors contribute to the growth in demand for consumer goods at affordable prices in Turkey by wide social groups. There is very fierce competition in the market for natural mineral water and carbonated drinks. As a result, companies that can offer cheaper products have a great competitive advantage in the market. The optimization of production costs and logistics costs is therefore a fundamental goal of the more than 300 companies in the sector located in Turkey, to achieve which continuous investments in new technologically advanced plants are needed. In summary, Turkish bottling companies prefer machine manufacturers capable of providing plants with increasingly shorter delivery times, compact layout solutions, increasingly high production speeds, technologies that adopt eco-sustainable solutions and ensure reduced energy and management costs. In this context, SMI, through the new branch in Istanbul, is able to support the numerous existing and potential customers even more effectively in choosing the solution that best suits their needs, to assist them in after-sales activities and in the supply of spare parts.

Q: How did existing and potential customers receive the news of the opening of the branch?

A: It was a very warm welcome, not only from existing customers, but from all the major players in the market.

The great advantage of SMI MAKİNA TÜRKİYE derives from the fact that its team has a long direct experience in the sector as a user of various types of bottling and packaging machines, both produced by local and international companies. Thanks to this experience, we are well aware of the difficulties that every operator has to face on a daily basis; therefore, the presence in Turkey of a direct branch, managed by native speakers and which carries out sales, assistance and spare parts supply activities, demonstrates the high consideration that SMI has of our country and local customers.

Q: What are the demands of buyers of bottling and packaging plants in terms of performance?

A: Without any doubt, the cost and quality of the product are the determining factors in the purchasing choices of end consumers. Therefore, the lightening of containers, the use of high-performance materials, the high quality of packaging, the preservation of product characteristics, etc., are all objectives that companies operating in the food & beverage sector can pursue by making use of highly experienced partners such as SMI, which offers the latest generation technologies for stretch-blow moulding, filling and packaging.



Q: And what about services?

A: The presence of a branch in Turkey, with mother-tongue technicians, offers great support to the assistance activities of the SMI headquarters in Italy. Soon the SMI MAKİNA TÜRKİYE team will expand further to welcome new technicians and spare parts operators to offer even more efficient and competitive support in every corner of the country.

Q: What is your opinion on current market trends?

A: As explained at the beginning, Turkey is a very large and fast-growing country, which, like the rest of the world, faces various economic challenges. For the production of water and beverages, I believe it is increasingly important to provide extremely efficient and competitive production lines. SMI, thanks to its long experience in the sector, is able to support customers with innovative ideas, especially in the field of "smart packaging" solutions. The birth of the Istanbul branch is a further step forward to offer experience and professionalism on site and immediately support customers for commercial and technical activities.





FOODTECH VILLAGE

Innovation and excellence come together: this is the philosophy of FoodTech Village, the virtual platform launched by Chiriotti Editore, where the future of the food and beverage industry manifests itself in all its forms.

In this new digital ecosystem, you can explore the latest frontiers of technologies and innovations to meet the needs of numerous companies operating in the food and beverage industry.

As part of the initiatives created to spread knowledge and expand growth opportunities, various workshops are organized within the FoodTech Village, such as the one held on May 14 entitled "The latest frontiers of packaging", which saw the participation of SMI as a speaker.

The topic addressed by Fabio Sisimbro - Sales Director of SMI - focused on the design of packaging lines integrated with solutions based on artificial intelligence, to optimize production processes and ensure significant energy savings.



A NEW VIRTUAL TOUR TO DISCOVER THE LATEST SMI NEWS

After the success of the first "virtual showroom" held in 2021, SMI recently presented the updated version for 2025.

The new virtual showroom is an interactive platform, which can be consulted anywhere, offers a stimulating guide to the extraordinary world of bottling and packaging and accompanies the visitor to discover the latest technological developments made by SMI in the design and construction of complete lines that are increasingly intelligent, efficient and eco-sustainable.

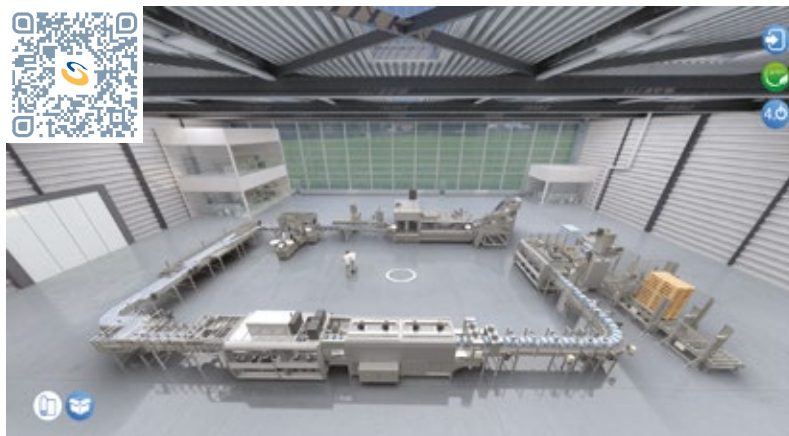
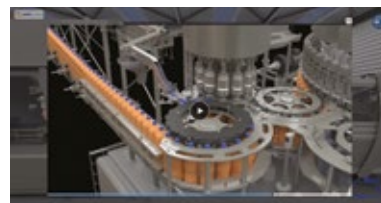
By entering a series of virtual environments, represented by the different machines that make up a line, the visitor can click on the information points to obtain details on the systems, in terms of functionality and advantages.

In the field of primary packaging, it is possible to discover the advantages of the wide range of SMI stretch-blow moulders for the production of containers of different shapes and sizes with speeds of up to 50,000 bottles/hour.

The tour then continues to discover the advantages offered by the range of fillers, cappers and labellers.

In the dry packaging section, visitors can discover the advantages of shrink wrappers, to pack a wide range of containers using standard or 100% recyclable film, or case packers, which can use various types of cardboard including light kraft cardboard, RSC boxes, corrugated, etc.

The visit ends by discovering the latest developments for the end-of-line, i.e. SMI palletising systems consisting of numerous modules that can be configured in a customised way.



CORPORATE WELFARE: THE LUNCH BREAK AT THE CENTER OF WELL-BEING

From the end of September 2024, the SMI Group's company canteen officially went into operation. This adds another important piece to the concept of corporate welfare, because, when it comes to employee well-being, the moment of the lunch break is undoubtedly one of the main aspects. SMI's partner in the construction and management of the company canteen is the company Pellegrini Group, one of the main operators in Italy in the collective catering market (schools, companies, hospitals, nursing homes). Founded in 1965, this company is redefining the concept of corporate catering, combining high quality with technological innovation and sustainability. In an elegant and functional environment, enjoying freshly prepared hot and cold dishes, the lunch break satisfies the palate and the health of workers, employees and occasional visitors. The menu, designed in collaboration with expert nutritionists, guarantees a wide range of choices with particular attention to the calorie content of the dishes and the seasonality of the food. The canteen is located inside the SMI Group headquarters in San Giovanni Bianco, where meals are also prepared and distributed to the subsidiaries SMIPACK and SMIMEC situated in other locations.



SHARE RESULTS TO INCREASE CUSTOMER SATISFACTION

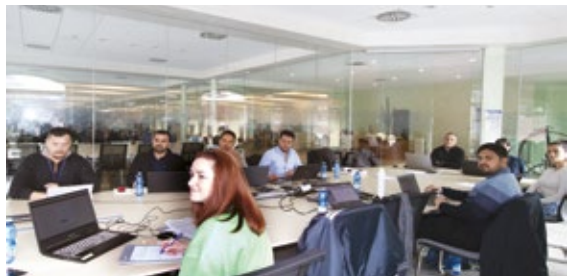
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From 24 to 28 February 2025, the international meeting of the heads of after-sales activities of the Group's subsidiaries was held at SMI.

The meeting, born with the aim of stimulating an adequate and constructive comparison between colleagues operating in different markets, was based on a goal that unites all employees of after-sales assistance activities: customer satisfaction! During the five days, the situation on the markets managed by each SMI branch was reviewed, sharing experiences, results, operational strategies and new proposals, in order to be able to promptly address the needs of an increasingly dynamic and demanding market.

There was no shortage of moments to get to know colleagues who work all over the world and see all together the news and future projects proposed by the parent company.





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