

BEPENSA BEBIDAS - FADEPLAST

smi  
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Magazine 2024/29

# *In harmony with Nature*

ECO-FRIENDLY BOTTLING &  
PACKAGING SOLUTIONS

## **SMICAM**

TEAMWORK  
IS ALWAYS  
A WINNER

## **SMIMEC**

PASSION FOR  
MECHANICS AND  
THE ENVIRONMENT





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# EDITORIAL 2024/29

Collaboration and trust.  
The resources of  
interconnected  
companies.



Today, in order to face the competitiveness of the growing market and the future challenges that follow, companies must face the transition from a flat and linear structure to a network one, characterised by high relational exchanges. And, in a world of interconnected relationships, where all elements of the network have a strong mutual responsibility and must collaborate with each other to ensure excellent teamwork, trust is essential. In this issue of SMI NOW we would like to show you two case histories based on a strong relationship of trust and collaboration. Bepensa Bebidas, in Mexico, after the first project for the bottling and packaging of Cristal water at the Cancun plant, relied on SMI for the installation of 2 other lines for the Merida and Dominican Republic plants. In Colombia, in order to increase the production of empty bottles to be sold

on behalf of third parties, Fadeplast purchased the fourth EBS 4 K ERGON stretch-blow moulder. Internally, the teamwork that characterises SMI's activity has led to the development of versatile packaging solutions, such as the ACP 22 ERGON pick & place case packer with double gripper for products, to meet the needs of a rapidly changing market. There is no shortage of developing increasingly sustainable packaging solutions. In the field of primary packaging, SMI's eco-design focuses on the development of lighter containers, made of rPET and without labels. A trend, the latter, which is spreading more and more among the main brands and will have a very strong marketing impact. Even for secondary packaging, we are witnessing a gradual abandonment of unsustainable solutions, replaced by the use of more sustainable packaging materials, such as recycled film. Thank you for your attention and I hope you enjoy your read.

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

sminow | magazine

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SEAS WITH TRANSPARENT WATERS AND WHITE SANDY BEACHES; ARCHAEOLOGICAL SITES, WHICH PRESERVE AND PROTECT THE REMAINS OF ANCIENT MAYAN CIVILIZATIONS; PARKS AND NATURAL BEAUTY ALL TO BE ADMIRER. WELCOME TO CANCUN, A FASCINATING CITY IN MEXICO, WHICH BOASTS THE PRESENCE OF CUTTING-EDGE COMPANIES SUCH AS EMBOTELLADORA BEPENSA CANCUN, A DIVISION OF BEPENSA BEBIDAS, AN IMPORTANT BOTTLER OF THE COCA-COLA COMPANY BRANDS.

➤ **WATER SECTOR**

BEPENSA BEBIDAS, S.A. DE C.V.  
 Mérida, Yucatan, Messico  
 Plants in Cancun, Mérida and Santo Domingo  
 (Repubblica Dominicana)



COMPLETE 24,000 BPH LINE FOR BOTTLES IN PET, CONSISTING OF:

- Rotary stretch-blow moulder, model EBS 10 KL in ECOBLOC® ERGON with monobloc HEVF/ECO 60/94-12/94
- EASY CAP 40
- Conveyors
- CSK 40 F ERGON packer
- Automatic palletising system APS 1570
- Subsupply: labeller, level and cap control, marker, automatic pallet wrapping system



# BEPENSA BEBIDAS



# LET'S DIVE INTO HISTORY

In the Yucatán Peninsula, a fertile plain that extends to the Caribbean Sea, you can discover important Mayan sites such as Chichén Itzá and Uxmal, as well as enjoy the splendour of breathtaking beaches and sea. Yucatán is also the land where drinking water comes from natural pools formed by rain known as "cenotes" or "sacred pools", i.e. karst caves that hide crystal-clear lakes. And talking about water, we cannot help but mention companies such as Embotelladora Bepensa, which, in order to respond to the growing market demands for Cristal bottled water, recently turned to SMI and ENOBERG for the supply of a complete line for bottling and packaging in 0.335 L / 0.5 L / 0.6 L / 1 L and 1.2 L PET bottles.



## ...THANKS TO FLEXIBILITY, TIMELINESS AND EFFICIENCY

### ➤ THE MARKET FOR BOTTLED WATER IN MEXICO

The volumes of bottled water in Mexico have been growing steadily for several years and also for the future, accurate market studies predict an average annual increase between 3 and 4% from 2024 to 2028, with higher growth rates for the still water segment than for sparkling water. It is also estimated that the average consumption per capita during 2024 will be around 250 L.

# A SOLID RELATIONSHIP OF TRUST...

The line installed in Cancun is the first of three lines for bottling and packaging the Cristal brand natural water supplied by SMI and ENOBERG to Bepensa Bebidas; the second was installed at the Merida plant, also in Mexico, and the third at the Dominican Republic plant. The line installed in Cancun is the first of three lines for bottling and packaging the Cristal brand natural water supplied by SMI and ENOBERG to Bepensa Bebidas; the second was installed at the Merida plant, also in Mexico, and the third at the Dominican Republic plant. The collaboration between Bepensa Bebidas, SMI, ENOBERG and the Mexican subsidiary Smicentroamericana is the result of a long-standing strategic partnership that allows Bepensa to have high-tech machines and equipment and to make use of timely and efficient technical, commercial and after-sales consultancy.

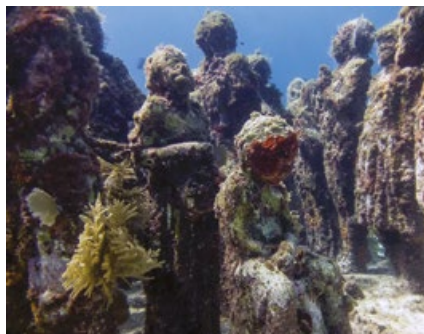
The project that led Bepensa Bebidas to purchase 3 new bottling and packaging lines for Cristal natural water focused on a few simple aspects, first of all the need for an efficient and extremely flexible line solution to process 5 different formats of PET bottles within the same production line, followed by the speed of format changes and the timeliness in the delivery and installation of the systems. The new line supplied to Embotelladora Bepensa Cancun, intended for the bottling of Cristal water, includes an integrated ECOBLOC® ERGON system consisting of a compact EBS 10 KL ERGON stretch-blow moulder by SMI and an electronic volumetric filling system for natural water HEVF/ECO 60/94-12/94 by ENOBERG; for secondary and tertiary packaging, the Mexican company has chosen a solution that includes a CSK 40 F ERGON film-only shrink wrapper and an APS 1570 ERGON palletising system, both produced by SMI.





# MEXICO

## THE MAGIC OF AN ANCIENT WORLD

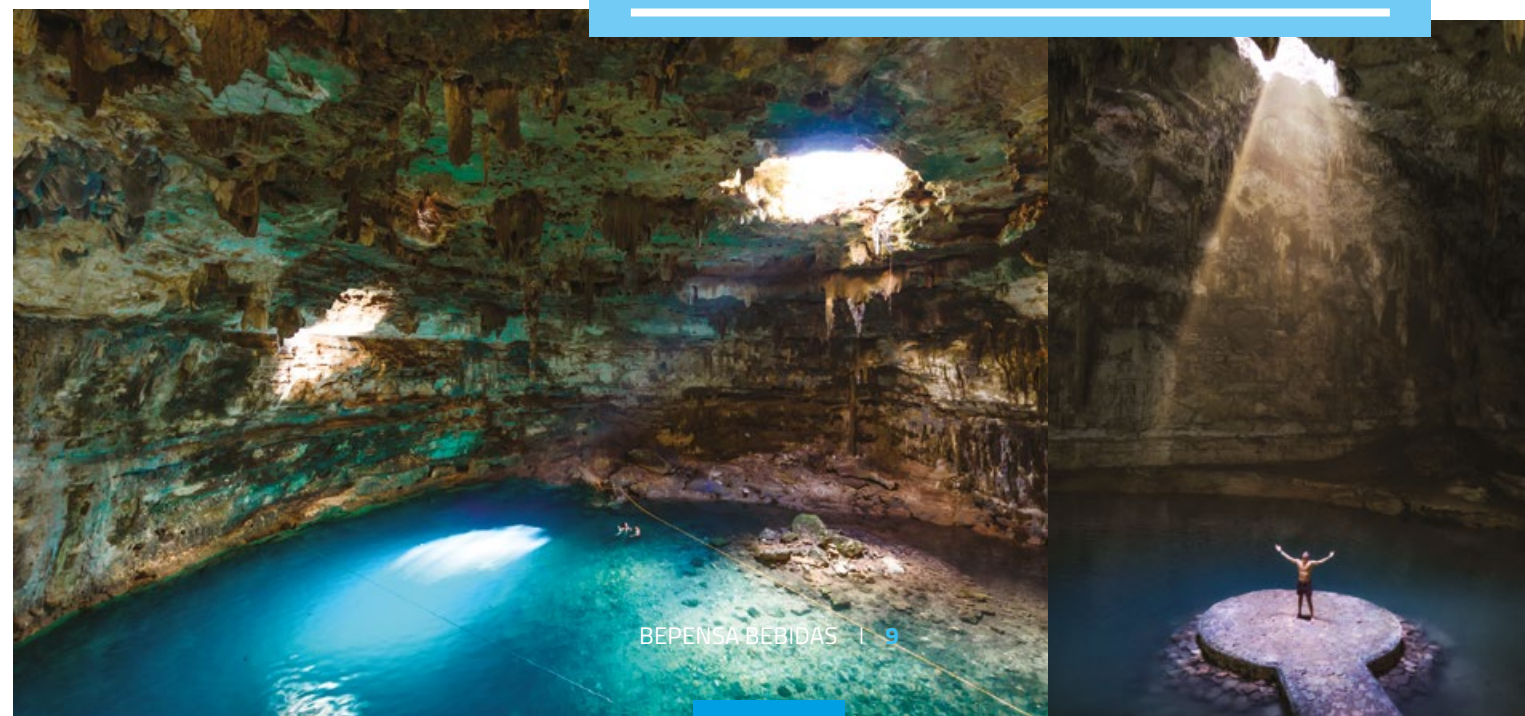


### ➤ CENOTES: WATER AND SACRED RESOURCES FOR THE MAYA

About 66 million years ago, the impact of an asteroid 15 km in diameter on the Yucatán Peninsula created a 200 km wide crater within which water flowed, creating thousands of cavities. Over the millennia, some of these limestone cavities have collapsed while others have eroded, forming a dense network of flooded caves: the "cenotes".

For the Mayan civilisation, these water-filled cavities were considered sacred entrances, through which they could communicate with the dark world of Xibalba, where the gods and spirits of the dead lived.

Today, the "cenotes" offer 95% of the drinking water to the local population and the possibility for visitors to snorkel and dive in its pools. Cathedral-like ceilings and mineral-rich waters have become among the Yucatán region's most popular natural attractions, though thousands of these caves still remain hidden beneath the lush jungle.





# WATER, RESOURCE OF THE UNIVERSE

**W**ater is a source of life, a right for everyone, it is a non-renewable and potentially exhaustible good. Hence the importance of the behavior of bottling companies in adopting sustainable and virtuous production systems. Embotelladora Bepensa is a socially responsible company, which actively contributes to the economic and social development of the environment in which it operates. Certificates and awards received from the Ministry of the Environment attest to the clean and sustainable production system adopted by this important Mexican company. The Cancun-based company is constantly striving to improve the water efficiency of its plant's operations and reduce water consumption in relation to the litres of beverage produced; a key element in the pursuit of these objectives are the continuous investments in technological innovation, which also include the SMI and ENOBERG machinery recently

installed in Cancun, Merida and the Dominican Republic for the bottling of Cristal water. The latter is packaged in bottles made up of 100% other bottles, thanks to recycling technologies and processes that transform PET safely; The result is a completely recycled and recyclable blue-toned bottle that maintains the quality and freshness of the water.





# SMI AND ENOBERG SOLUTIONS

## ➤ FOCUS ON THE BEPENSA WORLD

Bepensa is the third largest bottler of Cola-Cola in Mexico. Founded in 1946 in Mérida, in the Mexican state of Yucatán, by Fernando Ponce G. Cantón, Bepensa is today a multinational industrial company active in the automotive and beverage sector, consisting of 40 companies grouped into five divisions (Beverages – Industrial – Motor – Capital and Spirits), which can count on a workforce of over 15,000 people. The beverage business has bottling and packaging facilities in Mexico, the United States and the Dominican Republic, producing millions of units of 59 different brands every day, many of which are global leaders in their respective categories, serving the needs of more than 350,000 customers and millions of consumers. In terms of sales volume, the Bepensa Bebidas S.A. de C.V. division is the third most important bottler in Mexico and the United States and the fifth in Latin America; this important industrial reality produces, markets and distributes a portfolio of 35 brands of The Coca-Cola Company, in particular soft drinks, water and ready-to-drink drinks.

## FOR EMBOTELLADORA BEPENSA

Bepensa Bebidas is constantly committed to meeting the needs of consumers by offering high quality products packaged in practical package formats. Each bottling plant in PET containers is managed by the Mexican company in a socially responsible way, reducing the amount of plastic used as much as possible without altering the functionality and appearance of the containers themselves.

Recent investments for the installation of three new production lines within the Cancun, Merida and Dominican Republic plants focused on the need to have extremely flexible multi-format systems to quickly switch from one production batch to another; a demanding challenge, considering that Bepensa's traditional production system has always been based on single-format lines. Another request from the company to SMI and ENOBERG, was to be able to quickly have the new systems available to meet the growing market demand for Cristal bottled water.

Great teamwork between the customer and suppliers has made it possible to achieve all the objectives set, thanks to which Bepensa has obtained the required market competitiveness and preserved the quality of bottled and packaged products.

### ➤ ROTARY STRETCH - BLOW MOULDER EBS 10 KL ERGON

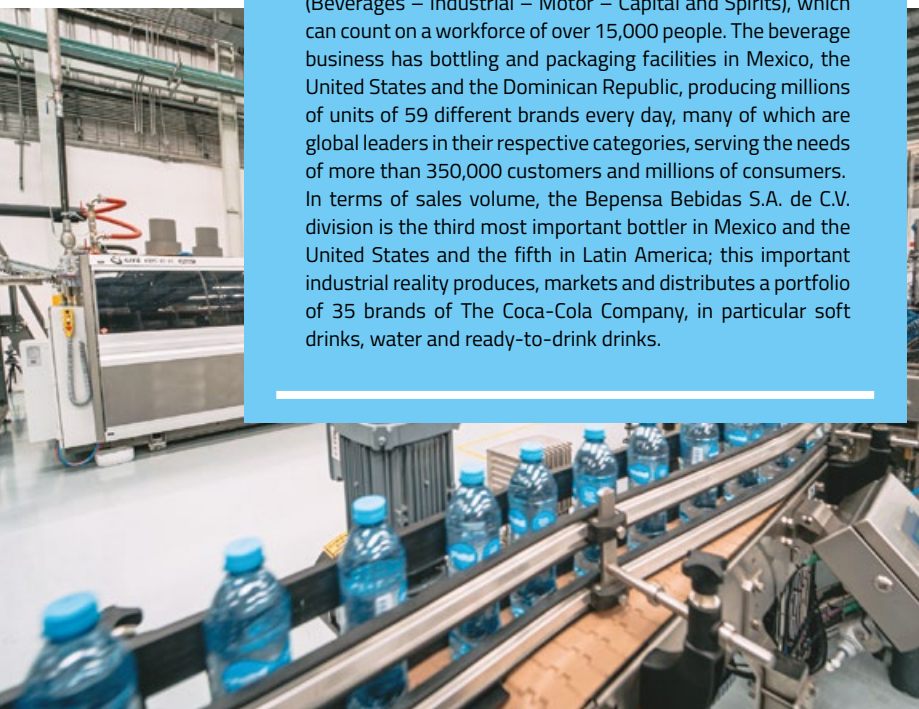
**Functions:** stretch- blow moulding, filling and capping 0.355 L / 0.5 L / 0.6 L / 1 L e 1.2 L bottles in PET with natural water at max. speed of 24,000 bph

#### ➤ Key features:

- simple and fast format changes, essential for quickly switching from one bottle format to another within a multi-format production line
- compact design thanks to the preform heating section integrated with the stretch-blow moulding section
- reduced transport costs
- quick and easy installation and start-up
- reduced energy consumption: the stretch-blow moulding carousel is equipped with motorised ironing rods controlled by electronic drives, which do not require compressed air. In addition, the current consumption is lower than linear motor solutions
- high-performance valves and low dead volumes (-50%) that ensure reduced pre-blowing and blowing times and better quality of the bottles produced
- reduced tunnel consumption: optimised chain pitches according to the preform diameter
- highly efficient preform heating due to uniform heat distribution
- reduced mechanical intervention: the servo motor automatically adjusts according to the production speed
- simple and intuitive HMI
- less wear and greater precision of handling of the blow moulding machine: handling of the grippers based on springless preform/bottle grippers equipped with desmodromic cams
- easy management and maintenance.



WATCH THE FULL VIDEO







➤ **HEVF/ECO 60/94-12/94 FILLING AND CAPPING MONOBLOC IN ECOBLOC® CONFIGURATION WITH STRETCH-BLOW MOULDER**

**Functions:** filling and capping of 0.355 L / 0.5 L / 0.6 / 1L and 1.2 L bottles in PET with Cristal natural water.

➤ **key features of the system:**

- filling system with high-precision flowmeters installed near each tap
- frame entirely made of AISI 304 stainless steel
- isolation of the filling chamber from the external environment, thanks to gaskets installed on the doors, the upper cover and an air blowing system that allows to generate an overpressure of sterile air inside the work environment, protecting it from external agents and allowing air recirculation
- machine table inclined towards the drainage points: this solution ensures the drainage of liquids from the filler to the outside in order to avoid stagnation with a consequent higher level of hygiene
- the parts in contact with the product are made of AISI 316 stainless steel
- quick and "tool-less" bottle format changes
- dummy bottles (for CIP washing of pipes) with automatic insertion: a solution that allows a higher level of hygiene and considerable time savings for the preparation of the machine for CIP washing
- easy access to all parts of the filler for complete and efficient maintenance.



➤ **EASY-CAP CAP TURNER 40M**

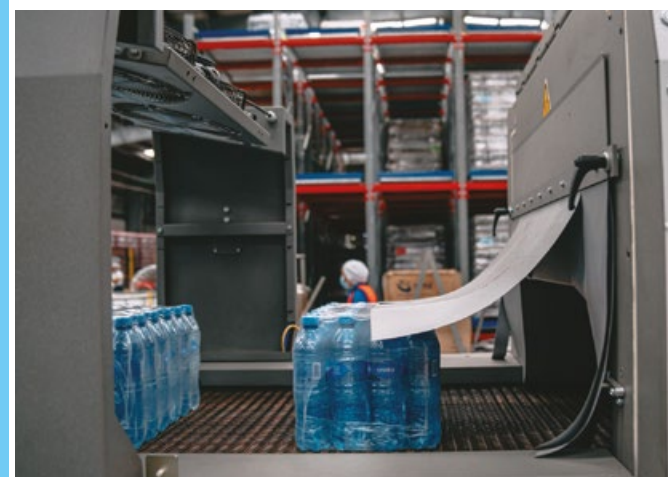
**Functions:** it picks the caps from the hopper and turns them correctly to the bottling line.

➤ **Key features of the system:**

- gravitational cap turner
- very compact design, suitable for any layout solution
- made of AISI 304 steel
- smooth and linear operation, to transport only the correctly turned caps
- system suitable for different types of plastic caps
- "user-friendly" operator interface, which allows easy and efficient use of the machine by the operator.







#### ➤ CSK 40 F ERGON SHRINK WRAPPER

**Packed containers:** 0.355 L / 0.5 L / 0.6 L / 1 L and 1.2 L PET bottles.

**Packs made:** 6x4 format in film only for 0.355 L / 0.5 L and 0.6 L bottles; 4x3 format film only for 1 L and 1.2 L bottles.

#### Main features of the packaging machine:

- machine equipped with a motorised system of oscillating guides at the infeed, which facilitates the correct channeling of loose containers on a conveyor belt equipped with chains in thermoplastic material with low coefficient of friction
- grouping of bulk containers in the desired format carried out continuously by means of electronically synchronised rungs and separator bars
- film cutting unit with a compact design, where the blade is managed by a brushless motor with direct "direct-drive" transmission that makes the cutting operation more precise and simplifies maintenance
- new 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 shrink tunnel installed in Bepensa is equipped with a metal chain and lubrication capable of ensuring better sealing of the film under the pack
- the tunnel efficiently and homogeneously manages the distribution of hot air flows over the entire surface of the pack being formed
- reduced energy consumption and maximum environmental compatibility of production processes
- optional system for automatic format change adjustments
- machine equipped with additional optional devices to ensure high quality of the final pack, such as the additional 1,150 mm belt placed at the tunnel exit for rapid cooling of the packs.

#### ➤ AUTOMATIC PALLETISING SYSTEM APS 1570 ERGON

**Packed containers:** bundles in film only from the CSK 40 F ERGON shrink wrapper (6x4 packs of 0.355 / 0.5 and 0.6 L bottles and 4x3 packs of 1 L and 1.2 L bottles).

**Pallets made:** 910x910 mm. The 0.355 and 0.5 L bottles on 7 layers; 0.6 L bottles on 6 layers while 1 L and 1.2 on 5 layers formats.

#### Main features of the system:

- single-column system with two Cartesian axes, extremely flexible and easily adaptable to the logistical conditions of the end-of-line area
- system consisting of different modules that can be individually configured according to palletizing needs
- the palletiser installed at Bepensa packs bundles in film only, but the system is also suitable for palletising cartons, trays and packages in general
- reduced maintenance costs and low energy consumption, thanks to the mechanical simplicity of the machine and the use of robotically derived components
- simple and intuitive automation and control system.





# FROM KANKUN TO CANCUN

Once known as Kankun, which means “pot of snakes” in the Mayan language, the city of Cancun was until the beginning of the last century a remote village with few fishing families. The economic development of the city began in the sixties, when the Cancun area was chosen as one of the most suitable locations for the construction of large-scale tourist facilities, quickly becoming one of the most popular destinations in the world for beach holidays and cultural excursions.



NATURE, HISTORY, MUSIC AND CULTURE... COLOMBIA IS FULL OF BEAUTY AND SPECIAL PLACES, SUCH AS BUGA, A HIDDEN GEM IN THE HEART OF THE VALLE DEL CAUCA REGION, WHERE WE ALSO DISCOVER ENTREPRENEURIAL EXCELLENCES SUCH AS THE FADEPLAST COMPANY, WHICH, FOR THE PRODUCTION OF PET BOTTLES FOR "PRIVATE LABELS", HAS CHOSEN SMI COMPACT STRETCH-BLOW MOULDERS OF THE EBS K ERGON SERIES.

# FADEPLAST

➤ **SECTOR CONVERTER**

FADEPLAST BUGA S.A.S. - QBCo Group  
Guadalajara de Buga, Colombia

➤ Rotary Stretch – Blow Moulder EBS 4 K ERGON





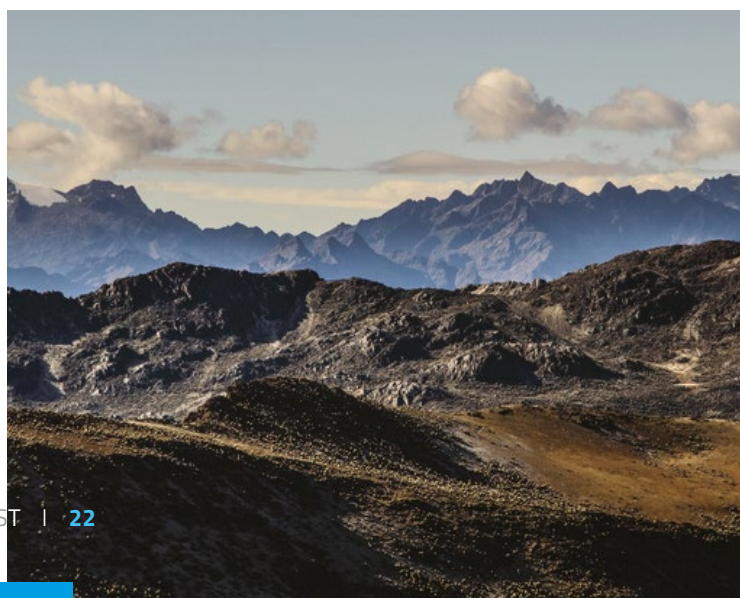
# COLOMBIA

## BETWEEN TRADITION AND INNOVATION

A trip to Colombia is a dive into history, culture and nature. In addition to beautiful cities such as Bogotá, Medellín, Cali or Cartagena, this country of more than 50 million inhabitants also fascinates with the colourful Barranquilla Carnival, the second most important in Latin America after that of Rio de Janeiro. Colombia also amazes with its

natural beauty, such as the Sierra Nevada de Santa Marta mountain range and the Tayrona National Park. But, if you're looking for a hidden gem, Buga is definitely the ideal town. Buga, officially known as Guadalajara de Buga, is a pretty town in the heart of the department of Valle del Cauca, in the western part of the country; it is a place that stands out for its authentic and relaxed atmosphere, colonial

charm and the presence of the great Basilica of Our Lord of Miracles, a place of worship that attracts thousands of pilgrims every year. Buga is also the headquarters of the company Fadeplast, a leader in the production of PET containers for third parties, which is part of the QBCo Group, one of the largest industrial companies in Colombia.



# QBCo GROUP

## A STRONG PARTNER THAT TURNS CUSTOMERS' IDEAS INTO REALITY

The Colombian QBCo Group is a strategic ally for many companies operating in the production and packaging of sauces, margarine, oil, vinegar, jams, soft drinks, cured meats, dairy products, cheeses, dry mixtures and vegan products. In this industrial field, each operator markets a wide variety of brands, so the success of a product on the market also depends on the right combination between the product itself and the packaging through which it reaches consumers. The ability to attract the attention of those who shop is, for example, a considerable advantage

over those who propose a less attractive or more anonymous "dressing" on the shelves in stores.

Not to mention that the process that starts from the idea of launching a new product, to the moment of its actual introduction on the market, can be very long and challenging, especially for many food "start-ups".

For this reason, many manufacturers rely on the skills and professionalism of "co-packers" such as QBCo, whose structure takes care of customer needs by offering a 360° service, which starts from production planning to the sale and distribution of products, ensuring high

flexibility in the processing times of the various brands and timeliness in deliveries.

The numerous and varied production activities of this Colombian conglomerate are carried out within 8 technologically advanced plants located in strategic areas and easily supplied with raw materials; among them there is also the Fadeplast plant in Buga, which stands on an area of 1500 m², whose production processes have the most important quality certifications.



LEARN MORE ABOUT  
THE QBCO GROUP





# PRODUCTION OF BOTTLES IN PET FOR THIRD PARTIES

**F**adeplast Buga S.A.S. operates in the field of manufacturing a wide range of plastic products. Founded in 2013, the Colombian company currently boasts a prominent position among the operators in the “converter” sector, i.e. manufacturers of containers intended mainly for the plants of companies in the “food & beverage” sector. In just over a decade, Fadeplast has reached a prominent position thanks to a constant growth in turnover; An entrepreneurial success that has made it necessary to invest in new technologies to

meet the strong demand for empty bottles from the market. To meet these needs, the Buga-based company turned to SMI for the supply of a fourth compact rotary stretch-blow moulder model EBS 4 K ERGON, which is added to the three already supplied previously. Since 2019, Fadeplast, in fact, has been producing a wide variety of PET and rPET containers using the latest generation SMI stretch-blow moulders of the EBS K ERGON series, a range of compact high-performance machines, which, in a single module, integrate

the preform heating furnace and the stretch-blow moulding section. This is the ideal solution to allow the user of the system high flexibility and maximum efficiency in the production of various types of containers intended for the packaging of water, carbonated drinks, oil, sauces, household detergents, etc. The EBS K ERGON series by SMI offers the advantage of allowing format changes to be carried out quickly and easily and machine management and maintenance operations with great ease.

# LOOKING AFTER LOTS OF BRANDS

**F**adeplast was created with the aim of responding to the countless requests from companies producing beverages, food, detergents, etc., which need a wide range of empty PET and rPET containers for bottling their brands. Many operators in the sector, especially small ones, carry out very varied productions in their plants, with the need therefore to frequently change format to go from one type of bottle to another or from one pack configuration to another. These businesses must therefore rely on the technology and professionalism of companies such as Fadeplast in order to have the containers they need, without having to invest

in the purchase of a stretch-blow moulder to produce them internally. Customers who turn to Buga’s Colombian company know that they can count on the expertise and attention of an experienced partner, able to assist them at every stage of the production process and the choice of raw materials. For the blow moulding of high-quality, high-performance bottles, Fadeplast uses the best raw materials available on the market and continuously invests in new technologies capable of ensuring high competitiveness, as demonstrated by the purchase of four compact stretch-blow moulders from the EBS K ERGON series by SMI.



## ➤ WHY DO MANY COMPANIES BUY EMPTY BOTTLES ON THE MARKET?

- Because the bottler can have the required containers at his disposal without having to invest in the purchase of a stretch-blow moulder.
- Because outsourcing is an eco-sustainable solution, since converters like Fadeplast have state-of-the-art systems that reduce CO<sub>2</sub> emissions.
- Because small and medium-sized enterprises in the sector benefit from the skills, professionalism and support of those who deal exclusively with the production of containers.
- Because by purchasing empty containers, beverage and food manufacturers can focus on bottling, packaging and distribution activities.



# SMI SOLUTIONS FOR FADEPLAST



## ➔ LESS PLASTICS, MORE LIFE

The research and development of new solutions, together with investments in new technologies and cutting-edge equipment, have allowed Fadeplast Buga to specialise in the production of lighter and more eco-sustainable containers than traditional ones, allowing customers to save on preform material. Furthermore, thanks to the use of efficient stretch-blow moulders, during the blow moulding process, the Colombian company is able to obtain a perfect distribution of the material on the walls of the container and to blow it with the lowest possible weight. Fadeplast uses high-quality and 100% recyclable preforms, in perfect harmony with the innovative concepts of the "bottle to bottle" production system.

The containers made are suitable for food, as they are blown with compressed air filtered by special devices that prevent the passage of bacteria and therefore the contamination of the products to be bottled. The Buga-based company also produces a wide variety of containers for operators in the detergent, cleaning and oil sectors.



## ➔ ROTARY STRETCH-BLOW MOULDER EBS 4 K ERGON

**Functions:** stretch-blow moulding of bottles in PET and rPET of various capacities.

**The key benefits of the stretch-blow moulder EBS K for third party production:**

- plant that meets the needs of flexibility, cost-effectiveness and efficiency of large-scale production
- simple and fast format changes, in order to be able to quickly switch from one bottle format to another and immediately adapt to the changing needs of the converters customer companies
- compact and ergonomic machine design: the preform heating section is integrated into a single module with the bottle stretch-blow moulding section
- highly flexible and high-performance technology, capable of processing various formats on the same machine (from 0.2 L to 3 L)
- solution also suitable for the production of lightweight and recyclable containers
- easy management and maintenance: the blow moulding machine has a low height and therefore no ladders are required for maintenance operations; In addition, the electrical panels are grouped in a single, easily accessible area
- system equipped with two-stage air recovery fitted as standard
- energy-saving furnace panels with even heat distribution
- reduced energy consumption: the stretch-blow moulding carousel is equipped with motorised ironing rods controlled by digital drives, which do not require compressed air
- reduced furnace consumption: optimized chain pitches according to the preform diameter
- reduced pre-blow and blow times and improved quality of the bottles produced
- less wear and greater precision of management of the blow molding machine, thanks to the movement of the grippers based on a system of preform grippers/bottles without springs equipped with desmodromic cams
- control panel equipped with a simple and intuitive operator interface.





# BUGA

## A HIDDEN GEM

**G**uadalajara de Buga, or simply Buga, is one of the oldest cities in Colombia. Founded in 1555 by Giraldo Gil de Estupiñán under the order of the Spanish conquistador Sebastián de Belalcázar, this town was home to many wealthy families from Spain. Today it is a pretty town of more than 100,000 inhabitants located in the heart of the Valle del Cauca region and an important destination for many Colombians who visit it for religious reasons, thanks to the presence of the Basilica del Señor de los

Milagros (the Lord of Miracles). Buga is surrounded by the natural beauty of Valle del Cauca, whilst the city's proximity to the Andes Mountains offers breathtaking views such as Lake Sonso. The place also offers a great mix of culture, history and daily life that pervades the streets lined with well-preserved buildings; The latter, with their colourful facades and traditional tiled roofs, reflect the city's long history dating back to the Spanish colonial era.

### ➤ VALLE CAUCA, THE ROUTE OF EMOTIONS

Valle del Cauca is a fertile region of western Colombia, where, thanks to the particular ecosystem, a lot of sugar cane is produced; is a valley surrounded by the Andes Mountains and characterised by jungle, swamps and beaches on the Pacific.

The Valle del Cauca is also a route of emotions that involves nature, music and culture and leads to the discovery of the San Cipriano Nature Reserve, an unspoilt tropical forest embellished with numerous waterfalls, where you can go birdwatching, whale watching or visit the sugar cane museum.





PICK AND PLACE CASE PACKER  
WITH DOUBLE GRIPPERS

# ACP 22 S ERGON



# ACP 22 S ERGON

## A PICK & PLACE AUTOMATIC CASE PACKER WITH DOUBLE GRIPPERS

A few years after the launch of the ACP 20 ERGON case packers with pick & place system suitable for making American-style cardboard boxes (RSC), SMI introduces the new ACP 22 S ERGON model, characterised by a double gripper for the products to be packaged.



### ➤ IN THE INFEEED SECTION

The product to be packaged, which must arrive already channelled, is transported by a belt with chains made of thermoplastic material with a low friction coefficient.

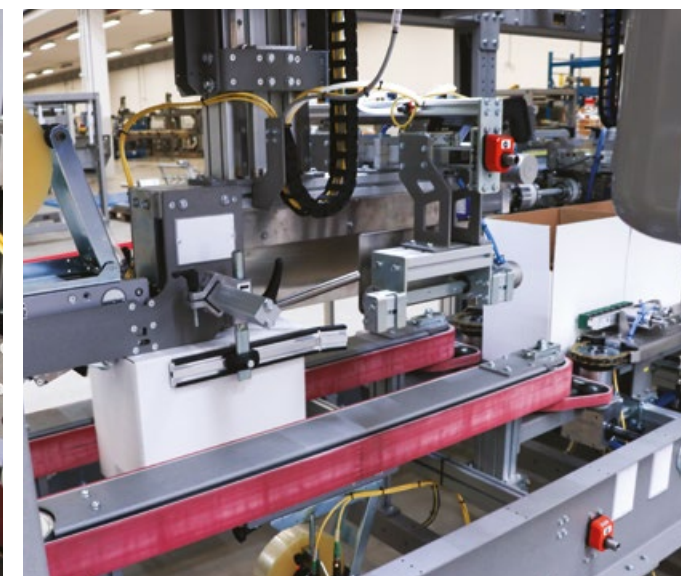
### ➤ IN THE CENTRAL SECTION

The case packer forms the cardboard boxes, inserts products and closes the pack. An alternating motion sheeter, equipped with vacuum suction cups, picks up the pre-folded cardboard blanks from the carton magazine (which is positioned outside the machine) and opens them, forming the RSC box. Special flap-folding devices then close the lower side flaps of the package, after which a special arm equipped with a double gripper grabs all the products arriving on the conveyor belt and gently positions them inside the two newly formed boxes. The double gripper thus serves as a pick & place device.



### ➤ IN THE OUTFEED SECTION

Special upper side flap folders operated by a semi-rotary cylinder keep the walls of the newly made box pressed, the final closure of which takes place by means of adhesive tape.





#### ➤ THE NEW ACP 22 S ERGON

The ACP 22 S ERGON case packer is a very versatile machine with speeds of up to 25 packs/minute (depending on the product processed) suitable for packaging various types of containers, both cylindrical and shaped.

The product feeding, American cardboard box formation, pack formation and box closing sections form a whole within a "monobloc" frame; In fact, all operations are performed by the same machine, which represents a compact solution that can be installed in any production plant, even small ones.

#### ➤ ADVANTAGES

- alternating packaging process (stop & go) by means of a pick & place system
- ergonomic carton magazine with easy blank loading
- possibility of overlapping the product during insertion in the box
- packaging of multiple types of containers for food and non-food products, including oval containers (shampoos, detergents, household products, etc.) and briks (tea, juices, etc.)
- solution also suitable for delicate products (wines, sparkling wines, liqueurs), because it does not damage the labels during packaging (model equipped with cardboard separator insertion device)
- easy machine access
- reduced mechanical wear and maintenance.



# BOTTLES CHANGE APPEARANCE

## AND STRIP OFF THEIR LABELS

The packaging is a strategic element for the commercial success of the product contained within it, therefore, its choice is an element capable of significantly influencing the profitability of the production activity and the sustainability policies of companies. The latter aspect, in particular, is dictating the rules for the development of new packaging solutions compatible with the increasing attention paid by consumers to this issue. Hence the need to create sustainable packaging solutions, which, in addition to the primary function of protecting products, must ensure a reduced environmental impact and help end users in carrying out proper separate waste collection. Sustainability in the field of packaging solutions is also expressed through creativity, with the design of containers and packages attentive to recyclability and respect for the territory. In the field of primary packaging, for example, SMI has long been committed to eco-design, i.e. the development of lighter and more sustainable containers, made of rPET and without labels. The latter aspect is a trend that is spreading more and more among the main brands in the beverage sector. The Portuguese company Carvalhelhos, for example, thanks

to the collaboration with SMI, has created a 0.5 L rPET bottle with a flat bottom, without paper or plastic labels, to improve and facilitate the recycling of materials. The area of the bottle reserved for the label has been eliminated by removing the ribs present in traditional solutions; consequently, thanks to an innovative combination of reliefs and bas-reliefs on the body of the bottle, there is a larger space used for embossing of the brand logo and a series of information generally present on the label. This solution made it possible to report the same information in Braille as well.



# CARVALHELHOS

*A Senhora das Águas*



### BOTTLES WITHOUT A LABEL OFFER DIFFERENT ADVANTAGES

#### For the environment and the consumer:

- eco-sustainable solution, because the PET bottle can be 100% recycled
- greater and better implementation of environmental legislation in terms of recycling
- the paper or plastic label has been eliminated; Even if they are made of recyclable materials, labels must be separated from the container during recycling operations
- no use of glue for label application
- less packaging material needs to be recycled.

#### For the bottler:

- savings on raw material purchase costs: labels and glue
- savings on raw material storage costs
- simplified and optimised production process, as there is no need for a labeller to apply the label
- simplified and optimised PET recycling process, as it is no longer necessary to separate the label from the container.



## “ECO-DESIGNED” SOLUTIONS DEVELOPED BY SMI

The study of the new bottle for the Carvalhelhos brand water takes shape with the development of an “eco-design” solution for the container that does not require the use of glue and paper or plastic labels, avoiding their removal during disposal and ensuring greater purity of the recycled PET material. Bottles without labels are easier to recover at the end of their life, because there is no need to remove paper and glue from the container during the washing phase that precedes the PET recycling phase. The result achieved, in addition to being perfectly compatible with the objective of respect for the environment, satisfies the aesthetic and image needs expressed by the Portuguese company, as the new bottle stands out on the shelves of the points of sale, attracting the attention of consumers.





# GREEN BUNDLES

A NEW LOOK  
FOR PACKS IN SHRINK FILM



**T**he biggest challenge facing food and beverage companies today is finding the right balance between product quality, consumer satisfaction and environmental friendliness. In the field of secondary packaging, there are continuous changes in the types of packages

required by the market, with the progressive abandonment of more traditional solutions and the increasing use of more sustainable packaging materials. For example, recyclable shrink film containing a variable percentage of post-consumer recycled (PCR) can be processed by all SMI shrink wrappers and combined

machines and allows an excellent quality result to be obtained, even in the presence of printed film; this material offers high resistance and all the mechanical characteristics necessary for proper shrinking, allowing for high quality packaging especially when a tunnel from the UHQ ERGON series is used.



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## DESIGN WITH US YOUR CIRCULAR PACKAGING

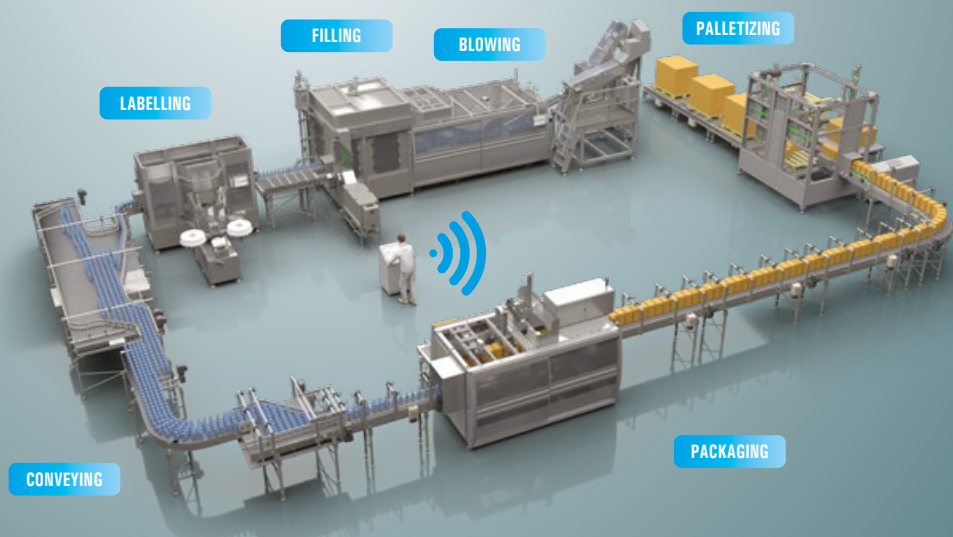
smi  
now



### IMPROVING YOUR CARBON FOOTPRINT IS EASY WITH SMI!

Our bottling and packaging systems benefit from Industry 4.0 and IoT technologies, can process recyclable materials such as rPET and allows for considerable energy savings.

Find out our solutions for packing a wide range of containers up to 50,000 bottles/hour.



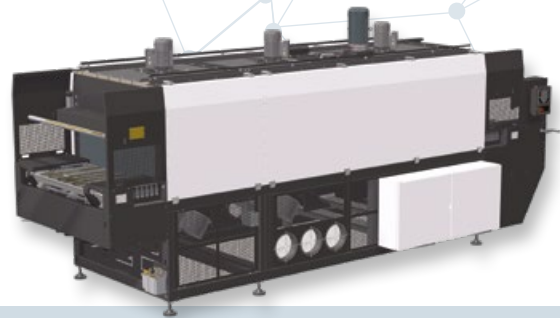
| ☎ +39 0345 40 111 | ✉ info@smigroup.it | [www.smigroup.it](http://www.smigroup.it) |



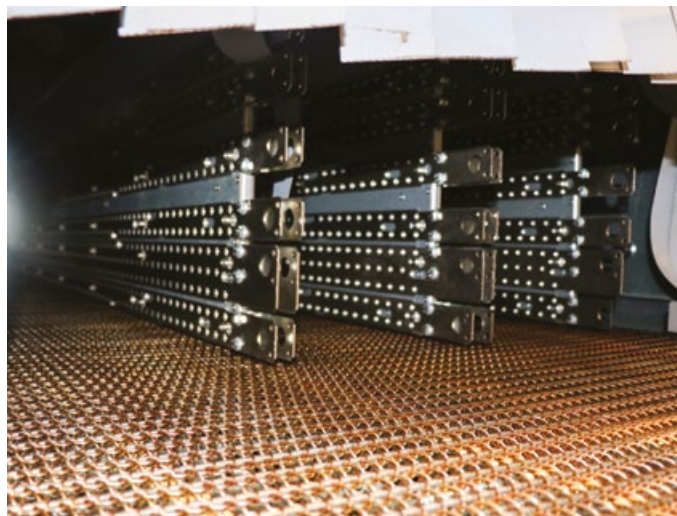


# SHRINK TUNNELS

## UHQ SERIES ULTRA HIGH QUALITY



**S**hrink tunnels are the most sensitive element in the film packaging process, as the quality of the bundles made largely depends on the operating efficiency of these machines, which must also ensure low energy consumption and high environmental compatibility for the user. SMI's strategy for the development of increasingly sustainable "packaging" solutions has led to the introduction of the new models of shrink tunnels of the UHQ (Ultra High Quality) series, suitable for the production of aesthetically perfect single, double or triple lane packs.



### ➤ THE TUNNELS OF THE UHQ SERIES ALSO MEET CURRENT AND FUTURE ENVIRONMENTAL REQUIREMENTS, THANKS TO A NUMBER OF INNOVATIVE ELEMENTS:

- use of newly developed technical solutions, which drastically reduce heat loss
- ventilation of the furnace controlled by inverter for the modulation of air flows by parameter
- internal blower conveyors, which direct the air flows to the sides of the bundle to obtain regular and uniform "bull eyes"
- independent additional ventilation, which produces a dedicated airflow for the internal blower conveyors, on the sides of the bundle
- automatic format change of the internal air conveyors
- constant temperature during the entire production cycle
- independent infra-chain deflectors between the furnace inlet and outlet, to direct the air flow to the bottom of the bundle and ensure optimal adjustment when working in double and triple lanes
- automatic lubrication of the conveyor belt chain
- outfeed conveyor belt equipped with cleaning brushes, to remove any film residues
- electrical cabinet on the side of the machine in a longitudinal position with respect to the direction of travel of the product, resulting in better thermal insulation and easy access to the operator.

## HST SERIES POWERED BY NATURAL GAS



**A**ll SMI shrink wrappers and combined machines are available in the version with heat-shrinking tunnel powered by electricity (standard solution) or with tunnel powered by methane gas; the latter version is an innovative and sustainable technological solution, since the advantages in economic (in many countries of the world) and environmental terms of methane compared to oil are countless.

Having a tunnel powered by natural gas instead of electricity is advantageous, especially where natural gas is available at affordable prices. In fact, comparative tests have shown that, where the conditions exist, a methane-fueled shrink tunnel allows for savings of up to 40% on energy costs compared to traditional power supply.





# SMICENTROAMERICANA

smi  
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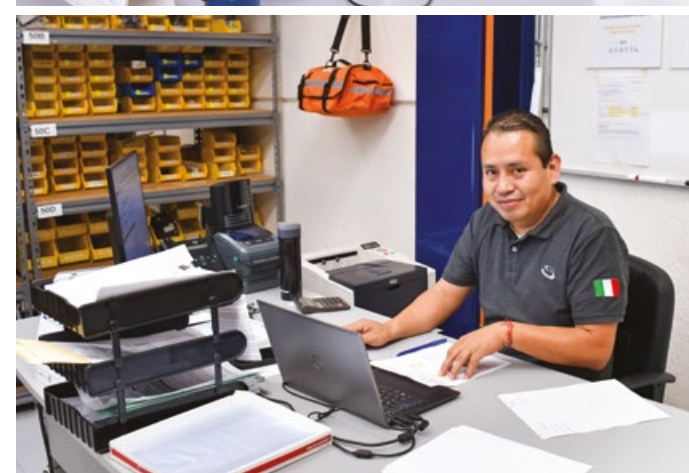
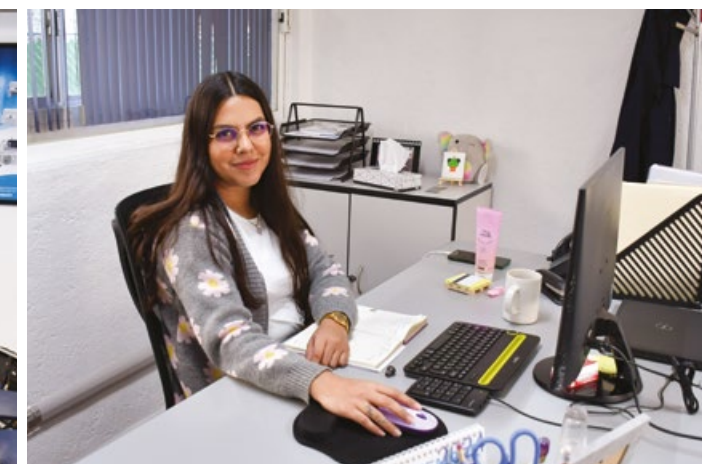
## SMI IS CLOSE TO CUSTOMER IN MEXICO AND CENTRAL AMERICA

### → FOCUS ON THE PACKAGING MARKET IN MEXICO

In 2023, exports from Italy to Mexico of packaging and packaging machinery grew by 25.7% compared to 2022, confirming Italy's position as a market leader for the supply of technological solutions for bottling and packaging.

For almost thirty years SMI has been present in Mexico with the subsidiary Smicentroamericana S.A. de C.V., which is based in Mexico City; It is a local structure whose presence is of fundamental importance in order to be able to respond promptly and effectively to the demands of an extremely dynamic market. Among the main factors that explain the strong dynamism of companies operating in the "food & beverage" sector is certainly the increase in consumer demand for packaged products, to which operators must respond by increasing the production capacity of their plants and adopting increasingly automated production and packaging systems.

SMI's Mexican branch was established in 1997 to respond promptly to market developments and to meet the needs of the many customers in the area. Smicentroamericana currently employs a staff of 28 people, who offer a professional service by providing expertise and experience in the development projects of new bottling lines and eco-sustainable solutions for the packaging of various types of products. Currently, the Mexico City-based company occupies an area of 1155 m<sup>2</sup> used as offices and spare parts storage. The growing need to expand its showroom has led Smicentroamericana to invest in a new and larger warehouse located north of the city; The new structure is spread over an area of 500 m<sup>2</sup> and allows an orderly management of shipments to customers and local distributors.





# A CHAT WITH PABLO GARCÍA

## → Managing Director of SMICENTROAMERICANA



**Q: How does Smicentroamericana respond to the strong dynamism that is characterising the Mexican market?**

**A:** Smicentroamericana has carried out a restructuring of its organisational structure with the aim of having a direct approach with customers at all levels; More specifically, the reorganisation process has led to an increase in the staff responsible for technical and commercial services, implementing various key accounts figures operating in certain geographical areas or by type of customer. To respond to the dynamism of the market, we have also given greater importance to project management figures, which are essential to ensure direct support to the customer from the beginning to the end of new projects.

**Q: What are the main customer requests?**

**A:** Companies are asking us for increasingly rapid answers in the study and development of technical and commercial proposals, necessary for investments in new machines or line systems. For this reason, Smicentroamericana ensures customers scrupulous and constant monitoring of the efficiency of the staff during the entire development cycle of new projects; In addition, we attach equal importance to the speed of spare parts supply and after-sales technical support.

**Q: What is Smicentroamericana's support in the face of requests for responsible and sustainable solutions?**

**A:** The need for gas ovens has increased

throughout the nation and Smicentroamericana has responded technically with cutting-edge solutions capable of reducing the carbon footprint in the packaging operations of various products in shrink film packages. SMI's offer includes several models of green shrink tunnels, including the methane gas-powered version is certainly a sustainable solution; in fact, the advantages in economic and environmental terms of methane compared to oil are countless, above all where, as in Mexico, the price of methane gas is particularly convenient compared to other fossil fuels. In addition, the subsidiary I run works hand in hand with customers and their packaging experts to reduce the weight of shrink wrap and blown bottles.

**Q: How important is the presence of a local branch for Mexican customers?**

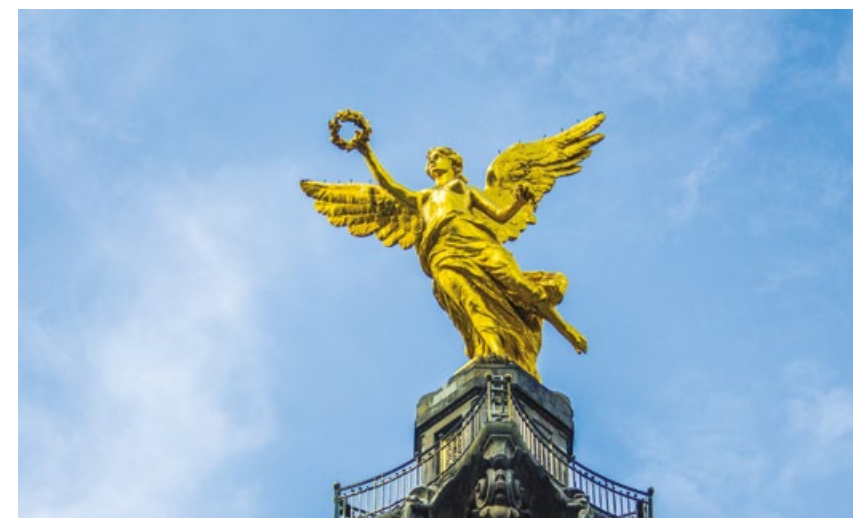
**A:** It is essential, because they know they can take advantage of a timely service in the supply of spare parts and technical and commercial assistance. At the same time, these elements represent the fundamental point of Smicentroamericana's success, because we are the only company in the packaging machine sector to have a local spare parts warehouse.

**Q: What do Mexican customers appreciate most about the services offered by SMI and Smicentroamericana?**

**A:** The timeliness of the responses and the direct and sincere approach with all levels of the Mexican and Italian structure. When customers turn to Smicentroamericana for the development of a new project, a strong teamwork is immediately created, based on trust and collaboration between the customer's team, the branch staff and the staff of SMI's headquarters in Italy. An example of this approach is represented by the recent collaboration between Bepensa Bebidas, SMI, ENOBERG and Smicentroamericana, which has allowed the Bepensa group to have machines and equipment with a high technological content and to make use of timely and efficient technical, commercial and after-sales consultancy.

## → INCREASINGLY SUSTAINABLE PRODUCTION

Mexico is the second-largest economy in Latin America. According to the World Bank, the country's economy grew by 3.2% in 2023, helped by increased consumption and strong growth in the service, construction and automotive sectors; all factors that have contributed to a 5% increase in demand for non-alcoholic beverages. Another trend that characterises the Mexican market is the increased sensitivity to the issue of environmental responsibility on the part of consumers, who have become more attentive to the environmental impact of the packaging of the products they buy. This trend is significantly impacting the activities of companies operating in the food and beverage sector, which are adapting production facilities to make them more sustainable and able to meet the demands for new pack formats and recyclable packaging.

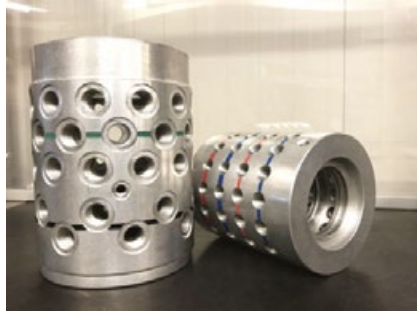




# SMIMEC

## PASSION FOR MECHANICS THAT RESPECTS THE ENVIRONMENT

SMIMEC was founded in 1999 for the production of structural parts, mechanical components and moulds in aluminium, steel, iron and cast iron for SMI Group companies and a growing number of customers in various sectors. The industrial plant, located in San Pellegrino Terme, covers an area of 10,000 m<sup>2</sup> and is equipped with 22 CNC machining centres, 15 of which are connected to the FMS line, which execute pre-established production programmes even in the absence of operators and operate 24 hours a day, 7 days a week.



## INNOVATING TO ANTICIPATE THE FUTURE

For 25 years, SMIMEC's activity has been characterized by competence, professionalism, passion and creativity. Innovation is a key factor for constant improvement and SMIMEC seizes all the opportunities offered by changes thanks to a pro-active approach to market demands. In order to carry out countless processes on behalf of third parties and offer a wide range of high-quality, precision components in compliance with current regulations, the SMI Group's mechanical workshop has a state-of-the-art machine park, continuously renewed, which meets the needs of the most demanding customers.

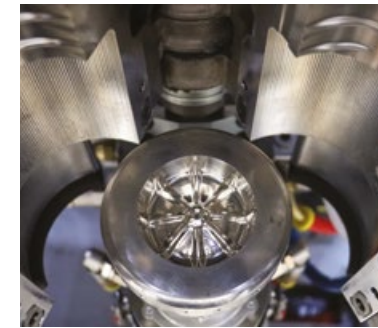
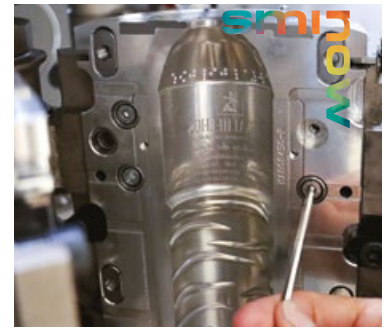
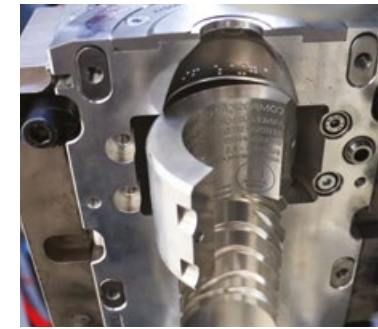
### ➤ QUALITY & PARTICULARITY MAKE THE DIFFERENCE

The beauty of any object, even a mechanical component, increases its value, becomes an element of distinction on the market to attract a greater number of consumers as well as attributing greater quality and particularity to the object itself. For this reason, SMIMEC gives priority to research and development activities, allocating a very significant percentage of its resources to them. Sustainable development is one of the essential values of SMIMEC's corporate mission, which aims to create a close harmony between industrial activity, product quality, respect for the environment and safety at work. SMIMEC, like all the companies of the SMI Group, adopts an Integrated Quality and Environment Management System in accordance with the UNI EN ISO 9001:2015 (Quality Management System) and UNI EN ISO 14001:2015 (Environmental Management System) standards. The attention to the environment is also demonstrated by the installation of 2420 m<sup>2</sup> of photovoltaic panels capable of delivering an annual energy of 375 GWh (nominal power 406 kW) and reducing CO<sub>2</sub> emissions.

## GIVING SHAPE TO IDEAS

The quality of the moulds installed on the rotary stretch-blow moulders, necessary for the production of the containers, and the efficiency in the stretch-blow moulding process are two fundamental elements to obtain quality bottles that attract the attention of consumers.

SMI, through its subsidiary SMIMEC, takes care of the entire production phase of the moulds installed on stretch-blow moulding machines. To meet the needs of customers who wish to produce both traditional bottles intended for label application and bottles without labels, SMIMEC manufactures special couplings to be inserted in the moulds mounted on SMI stretch-blow moulders. Size changeover operations to switch from one type of bottle to another are extremely simple and fast as it is sufficient to replace the plug section in the mould. Although the design change may seem simple, in reality such an operation represents a major change from a marketing point of view, as it promotes circular economy and helps to evolve the way brands communicate with their customers and differentiate themselves on shop shelves.







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