# SMI SOLUTIONS FOR EMBOTELLADORA BEPENSA

EMBOTELLADORA BEPENSA CANCUN, A DIVISION OF BEPENSA BEBIDAS, AN IMPORTANT BOTTLER OF THE COCA-COLA COMPANY BRANDS, 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.

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 three 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 five 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 shrinkwrapper and an APS 1570 ERGON palletising system, both produced by SMI.

Embotelladora Bepensa 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.

Recent investments for the installation of three new production lines 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 singleformat 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.

#### Rotary Stretch-Blow Moulder EBS 10 KL ERGON for Stretch-Blow Moulding of 0,355 L / 0,5 L / 0,6 L / 1L e 1,2 L bottles in PET at max. speed of 24,000bph.

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.

## HEVF/ECO 60/94-12/94 Filling and Capping Monobloc In Ecobloc® Configuration with Stretch-Blow Moulder

Filling system with high-precision flowmeters installed near each tap. Frame entirely made of AISI 304 st. st.

- 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 st. st.
- 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.

### CSK 40 F ERGON SHRINK WRAPPER to pack PET bottles in format in film only

- 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

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 palletising needs.
- The palletser 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.
- info@smigroup.it
- www.smigroup.it
- **4** +39 0345 40111

### **Yakult to Shut Factory**

Japan-based Yakult Honsha is closing a factory in China as part of changes to try to make its local business more competitive.

Yakult will shut Shanghai Yakult, a wholly owned subsidiary of Yakult China, which handles manufacturing and sales. Under the plan, the operations of the Shanghai factory will be relocated to plants in Wuxi and Tianjin.

In a statement, Yakult said it is aiming to "improve management efficiency" through the changes.



The Shanghai factory has been operational since 2006, is one of Yakult's seven production sites in China, with a capacity of approximately 16 million bottles. Yakult began local production in China in 2002 at a factory in Guangzhou. It entered the Shanghai market in a year later.

### SIG Partners with Ellen MacArthur Foundation

SIG announce its network partnership with the Ellen MacArthur Foundation. This collaboration aims to push forward the transition towards circular packaging systems, reinforcing SIG's commitment to environmental stewardship and innovation.

The collaboration will enable SIG to tap into the expertise of the Foundation and its network, further accelerating SIG's commitment to reduce waste, improve recyclability and increase the use of renewable materials. The partnership is an important step in SIG's broader strategy to innovate and scale circular packaging

solutions to create a zero waste, low carbon future for the packaging industry.

The Ellen MacArthur Foundation's mission is to accelerate the transition to a circular economy — one that eliminates waste and pollution, circulates products and materials, and regenerates nature — uniting its global network of businesses, policymakers, financial institutions, and experts to drive systemic change. As a network partner, SIG can exchange innovative strategies to advance business transformation.

"SIG is proud to be a network partner of the Ellen MacArthur Foundation. This reflects our unwavering commitment to building a sustainable future," said Samuel Sigrist, CEO of SIG. "Joining this global network aligns with our mission to innovate and lead the packaging industry towards a circular economy, where resources are reused, waste is minimised, and products are designed to benefit both people and the planet. Together, we want to redefine what's possible by working together to create packaging solutions that not only meet today's needs but also ensure a thriving tomorrow."