

Valley Water invests in a modern 36,000 bph PET plant

In the desert area of Wadi El Natrun, a depression about 23 m below sea level, Elano water is extracted and bottled by the Valley Water company. To increase the production of 0.6l and 1.5l PET bottles, the Egyptian company recently turned to SMI for the supply of a complete line of 36,000 bph.



The solutions for Valley Water

Valley Water pays great attention to environmental issues and for the bottling of Elano water in eco-compatible and recyclable PET bottles, uses green technologies of the latest generation that allow reduced environmental impact and energy savings. The 36,000 bph complete line allows the customer to optimise the space within the production plant. The new system consists of an EBS 16 E Ergon stretch-blow moulder in Ecobloc version with a HEVF filling and capping system; a WP 600 Ergon case packer; an APS 3070 L Ergon palletiser; conveyor belts, labelling machine, encoder and control systems.

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Increase efficiency and productivity

To preserve the quality of Elano water and offer consumers a pure, uncontaminated and healthy product, Valley Water pays great attention to every detail and collaborates with the experts of the industry. The decision to rely on SMI for the supply of a new complete line of 36,000 bph for the bottling and packaging of Elano water in PET bottles ranging from 0.6l to 1.5l is the result of a close collaboration between the two companies, that began in 2013 with the installation of a rotary stretch-blow moulder and a shrink wrapper from the LSK range for the packaging of 0.33, 0.5 and 1.5l containers in PET.

SMI has been involved in the process of automation of the end of the line of the pre-existing plant, to allow Valley Water to meet the growing demand for bottled water in Egypt, a market featuring one of the highest levels of consumption per capita in the world and in which consumers tend to choose healthy drinks. The new tech-

nologies supplied by SMI allow the company to achieve greater production capacity and efficiency, improved market competitiveness, high energy savings and reduced environmental impact, said SMI.

Restyling of the bottles to improve performance

Starting from existing 0.6l and 1.5l containers and keeping the "core concept" unchanged, SMI's designers emphasised the iconic image represented and improved the resistance and stability of the containers. These objectives have been achieved by enlarging the maximum diameter of the bottles and lowering their height, with the result of optimising the center of gravity of the same. The base of the bottle was also subject to a restyling process, with the aim of improving the mechanical properties of the containers during filling. Thanks to these measures and the supply of new moulds for the stretch-blowing, the entire packaging and palletising process of Valley Water has become more efficient and sustainable.



Ecobloc Ergon HEVF blowing-filling-capping system:

- compact solution for the blowing & filling of 0.6l and 1.5l containers: rinsing machine and air conveyors between blower and filler are not required
- rotary stretch-blow moulding system equipped with motorised stretch rods, for productions up to 36,000 bph
- precise management of the stretch rod stroke and accurate control of its position
- preform heating module with energy-efficient IR lamps
- two-stage air recovery system, for reducing energy costs
- easy management of the format changeover
- filling system with high-precision flow meters installed near each tap
- walk-in frame to easily access the filler and capper
- filling chamber isolated from transmissions
- machine frame inclined towards the drainage points, resulting in a higher level of hygiene

WP 600 Ergon wrap-around case packer:

- continuous packaging through a wrap-around system: smooth production process, without jerky movements
- packaging in impact-resistant 4x5 cases (0.6l bottles) and 3x4 cases (1.5l bottles): higher protection of the product during transport
- possibility to graphically customise the cardboard box
- sliding Posy control panel, which allows the operator an easy and efficient use of the system
- highly intuitive, graphical interface, touch-sensitive screen and advanced real-time diagnostics and technical support

APS 3070 L Ergon automatic palletising system:

- single-column system with two Cartesian axes for palletising cardboard boxes arriving from the WP 600 Ergon in 1,000 x 1,200 mm pallets
- flexible modular structure, adaptable to the logistical conditions of the line
- operational flexibility that allows the creation of multiple palletising patterns
- eco-sustainable solution, thanks to the use of ICOS motors equipped with integrated digital servo-drive (driver), able to simplify the wiring of the machine and ensure greater energy efficiency, lower noise and reduced wear of the components
- optimised TCO (Total Cost of Ownership) thanks to low management and maintenance costs