

Environment protection combined with product protection

Recycle – Regenerate – Reuse

The growing consumers' awareness towards the problems of the ecosystem in which we live influence the activity of the companies that prefer the use of sustainable packaging, such as rPET and cutting-edge technical solutions, in order to save energy and reduce the production environmental impact.

Design of sustainable containers

Today all the main food and beverage manufacturers aim at promoting sustainable lifestyles in compliance with circular economy and support the importance of the responsible use of resources and recycle. Their commitment starts from the use of PET plastics: a 100% recyclable and regenerable material. Thanks to its advanced CAD center for 3D design, SMI supports companies in the design and graphic realisation of a wide range of 100% recyclable PET containers, featuring high quality and lightweight in order to save energy and material.

Green solutions for the primary packaging

The wide range of SMI rotary stretch-blow moulders from EBS Ergon range is able manufacturing PET or rPET containers of different shapes and capacities from 0.10l up to 10l. SMI says that the advantages of these machines are further enhanced in terms of space, energy and cost saving, when the blower is combined with a filler and a capper, which allows companies, actively involved in the environmental protection, to bottle their products in 100% recyclable, sustainable, light, unbreakable and safe containers with a high level of hygiene and suitable for the food and beverage storage.

A need to preserve product quality and protect the environment led for example Société des Eaux de Volvic to invest in SMI's Ecobloc Ergon integrated system for stretch-blow moulding, filling and capping 8l rPET containers. The new bottles are made from 100% recycled plastic and thus are 100% recyclable: a result that has been possible thanks to a joint work between the specialists at Danone and at SMI. Ecobloc Ergon HC, resulting from an intense activity of R&D, is claimed to stand

out for its compactness and flexibility, making this solution suitable even for those who do not have large spaces in their production plants. The system does not need a rinser, nor conveyor between the filler or accumulation; this means benefits in terms of space and costs.

Primary packaging plays a vital role for Volvic, as it has to maintain the purity of the spring water and preserve the product quality until it is consumed. That's the reason why environment protection is combined with product protection: bottles in fact go through a long series of controls during the whole bottling process, thanks to the integration of sophisticated inspection systems, that, starting from the preforms, carry out a long series of checks to maintain the quality and purity of the spring water and prevent any non-compliance issues or contamination.

Solutions for tethered caps

The tethered caps, that stay attached to the bottle after having been opened, will become an object of everyday use for European consumers from 2024, when 2019/904 directive will enter into force. The EU directive establishes the minimum recycle percentage in plastic beverage bottles (25% starting from 2025 and 30% starting from 2030) and

states that the caps of PET bottles have to be attached to the container, so that they can be recycled together with the bottle, thus avoiding they end up as waste in the environment. SMI, aware of the challenges posed by this directive to beverage manufacturers, offers solutions for producing containers with a percentage of recycled PET in compliance with 2019/904 and supports customers in order to evaluate the right tethered cap solution.

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