

ISHKA SPRING WATER: ECO-SUSTAINABLE SOLUTIONS

ISHKA IRISH SPRING WATER, FOUNDED IN 1978 BY MICHAEL SUTTON SR. THANKS TO A BRILLIANT FAMILY IDEA, IS TODAY A MULTIMILLION-EURO COMPANY MANAGED BY MIKE AND DENIS SUTTON, SONS OF THE FOUNDER.



Every hour the plant, consisting of four fully automated lines built in partnership with SMI, produces over 40,000 bottles of spring water, with the utmost attention paid to the care and preservation of the surrounding environment.

A Long-Standing Partnership

The collaboration between ISHKA and SMI began about 15 years ago with the purchase of an SK300F shrinkwrapper, currently installed on production Line 1, dedicated to the packaging of 250ml, 500ml, 750ml, 1.5L and 2L bottles. In 2017, on the occasion of the opening of the SMI UK & Ireland branch based in Manchester, the Sutton brothers turned to SMI for the expansion of their plants.

In particular the new investment of several million euros in 2020, concerned the installation of a new bottling line to increase the production of the 5L format, which is in great market demand.

A high-quality project, the implementation of which was entrusted to SMI; the latter provided a 'turnkey' solution, which also involved a new bottle design discarding the traditional square shape and launching a new cylindrical bottle. An innovative choice that allowed the Irish company to reduce the amount of PET in each bottle, and to align the appearance of the 5-litre container with that of the other elegant ISHKA bottles of smaller capacity.

Eco-Sustainable Solutions

Plastic bottle caps represent 10% of plastic waste found on beaches and the European directive 2019/904 on single-use plastics, includes a provision to regulate their recycling along with the rest of the bottle; for this reason the caps of PET bottles must now remain attached to the containers (tethered cap).

Driven by the goal of drastically reducing plastic pollution and

anticipating by three years the coming into force of the EU rules, ISHKA Irish Spring Water started to successfully introduce this type of cap in September 2021, becoming the first, bottled water company in Ireland to implement the directive.

SMI Solutions for the 5L Production Line

SMI developed the image of the new bottle starting from ISHKA specifications and designed an extremely efficient production line for this particular 5-litre container, which has allowed ISHKA to increase plant capacity by over 50%. The expansion project of the Irish company, made it necessary to upgrade the existing line, this involved replacing the old linear blow moulder with a modern integrated SMI ECOBLOC® system, consisting of a 3-cavity rotary blow moulder, an electronic filler and a capper.

This system upgrade permitted the installation of a faster and more efficient stretch-blow moulding and filling system, while at the same time maintaining a compact footprint, thanks to the fact that no conveyor belts are necessary between the blow moulder and the filler. The new project also posed a challenge in secondary packaging, as ISHKA required shrink film pack formats in 2x1 and 3x1 and a large (4x5) tray format to make a half pallet pack. SMI was able to satisfy customer requests without any problems thanks to the versatility of the SK502T ERGON shrinkwrapper, a twin lane machine, suitable for secondary packaging in trays with and without film, equipped with an optional system to also produce packs in film only. The SK502T ERGON shrinkwrapper is used to create a format consisting of a half-pallet display tray without shrink film. The packaging system groups 20 bottles in a 4x5 pattern, then forms a tray around the bottles, starting from a flat blank; Subsequently, the package thus created, is palletised and sent to supermarkets, ready for display. This secondary packaging solution offers a great economic advantage to ISHKA: instead of the traditional packaging solution, which used two separate machines (one for wrapping in film and one for creating 'maxi' trays), SMI proposed a solution consisting of a single automatic packaging machine, capable of performing both processes and, at the same time, occupying less space inside the production line. The 2x1 and 3x1 pack sizes in film only, are made by the same packaging system, which, after the format change which takes about one hour, is able to quickly switch

from the production of large sizes in tray only, to small formats in shrink film. The packs in film only, can be equipped with an external handle to make them more manageable and easier to carry. The palletising system requested by ISHKA also had to have the same flexibility as the rest of the line and for these reasons SMI designed the end-of-line in such a way, as to be able to manage both the small 2x1 and 3x1 multiple packs and the half-pallet tray format, which are automatically placed on a standard UK pallet for warehouse storage.

SMI Solutions for Complete End of Line in PET at 16.000 bph

In 2018, ISHKA expanded the production of small, format bottles in PET by installing another 16,000 bph production line for 250ml and 500ml formats at the Ballyneety plant. Thanks to the validity of the partnership with SMI, the Irish company relied on the 'made in Italy' technology for their new plant, focusing on a 'turnkey' solution for end-of-line packaging, from the existing labelling machine up to the new palletising system. By combining a CSK42F ERGON twin lane shrink wrapper and an LSK30F ERGON shrinkwrapper to re-pack in film only, SMI provided ISHKA with the ideal solution to easily create 'pack-in-pack' packages for large distribution. An example is represented by the 3x2, 500ml bottle in film only, which is formed initially in twin lane on the CSK42F ERGON packaging machine and then grouped into four packs, on the second packer the LSK30, from which the 'pack-in-pack' is ready to be palletised and efficiently distributed to the network

of supermarkets, hypermarkets and stores served by the Irish company.

The SMI APS 1550 ERGON palletising system offers a flexible quick-change solution to create a wide range of PET bottle packs in both 250ml and 500ml. The machine manages half pallets, euro-pallets and UK pallets and has an optional system that automatically loads the half pallets, on standard pallets for storage in the warehouse.

The beginning of the partnership between ISHKA and SMI began with Line 1 of the Ballyneety plant, the 16,000 bph PET line, currently dedicated to the production of 250ml, 500ml, 750ml, 1.5L and 2L bottles, inside which the SK300F shrinkwrapper has been in operation since 2009.

Thanks to the satisfactory results obtained with this machine, in 2017 the Irish company decided to invest in a new SMI SR 8 rotary stretch-blow moulder, to increase the production capacity of ISHKA's first line, which has been in operation for many years.

The installation was a huge challenge for the technical teams of SMI and ISHKA, because the new blow molding system had to be placed within the existing production line, minimizing the downtime of the water bottling and packaging activity.

The careful planning of the entire operation, the close collaboration between the two companies and the timely execution of the various steps, made it possible to successfully complete the upgrade of the plant, further consolidating the relationship of trust between ISHKA and the local branch of the SMI Group.

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