

# INCREASE PRODUCTIVITY AND EFFICIENCY

THE INDUSTRIAL WORLD IN GENERAL, AND THE BOTTLING AND PACKAGING SECTOR IN PARTICULAR, IS EXPERIENCING A RAPID EVOLUTION TRIGGERED BY THE UPHEAVALS CAUSED BY THE PANDEMIC, WHICH CAN BE TACKLED EFFICIENTLY AND SUSTAINABLY THANKS TO THE ADVANTAGES OFFERED BY DIGITISATION AND AUTOMATION.

SMI continuously invests in the development of packaging solutions, suitable to meet the needs of greater production efficiency and energy saving of production plants, offering a wide range of high-tech automatic machines capable of ensuring more flexibility, reliability and eco-

sustainability. In keeping with this goal, SMI has decided to renew the historic range of the SK series shrink film packaging machines, which is enriched with new hi-tech solutions to improve the entire packaging process and reduce the costs of production and management of the plant.

## Maximum Levels of Functionality with the Innovative 'Easy-Load' Magazine

The P and T models of the SK ERGON twin lane shrinkwrappers, suitable for processing pack formats in flat cardboard + film and tray + film, are fitted with the Easy-load device as standard, i.e. an automatic system for loading board, consisting of a series of motorised belt conveyors dedicated to feeding the carton magazine on the packaging machine. The advance of the cartons along the conveyor belts and their loading into the machine magazine, in order to optimise production efficiency, are managed by the automation and control system of the same. The Easy-load carton magazine is the ideal solution for packaging multiple types of containers in various pack formats, quickly passing from one configuration to another, because it ensures greater efficiency and precision in the management of dies of different thickness and guarantees greater tolerance in the variations of the same. From an operational and functional

point of view, the horizontal positioning of cardboard and the ergonomic design of the entire system allow the operator to easily load the stacks of blanks onto the magazine feed belts, placed externally to the machine at a working height congenial to this operation (instead of below it as in more traditional solutions).

#### Motors with Integrated Digital Servo Drives

The new SK ERGON shrinkwrappers are fitted with Smitec ICOS motors equipped with integrated servo-drives as standard, designed to guarantee high performance and remarkable results in terms of energy savings. Optimised to meet demanding applications on modern machinery, the brushless servo motors with integrated inverter, installed on the SK shrinkwrappers offer extraordinary flexibility thanks to a rich set of on-board I / O, real-time fieldbus and sophisticated control algorithms. They also represent a space-saving solution, thanks to the decentralisation on the machine, which allows to reduce the size of the electrical panels and the relative air conditioning system.

#### No Maintenance Thanks to Self-Lubricating Chains

The new SK ERGON 2021, are fitted with special self-lubricating chains as standard, the particularity of which, is that they do not require the use of lubricant, which is necessary for standard chains, thus representing a long-lasting solution without maintenance. This innovative solution offers two important advantages: on the one hand, it eliminates the danger of altering the packaged goods with the lubricant during their handling on the machine conveyor belt; on the other, it does not require the periodic maintenance required for classic chains, which consists of lubricating the chain links which are in continuous friction with each other.

#### Simplified Format Changeover

The latest generation of packaging machines are fitted with new sides on

the infeed belt as standard, these are equipped with side guides with new rollers and profiles that vastly simplify format changeover activities, reducing the time required to switch from one pack configuration to another. This solution is particularly useful for companies that need to process containers of different diameters, in different pack configurations, passing quickly and easily from one format to another and maintaining high production efficiency.

#### Intelligent Data Analysis

We cannot talk about the SK ERGON series without talking about the Smart Factory in general and Smart Production and Smart Service in particular. In a context where it is essential to continuously monitor and intelligently manage production, the choices adopted by SMI in terms of advanced automation and 'IoT-embedded' applications play a fundamental role in achieving the sustainable growth objectives of a wide audience of companies. The new SK ERGONs have their own digital intelligence, which allows the installation of a SWM line supervisor to record, analyse, optimise, automatically modify the production and operating parameters, exchange data and information with other machines and systems within a bottling and packaging line, to carry out self-diagnostic activities to detect and solve faults or anomalies, to notify the operator of the need for ordinary or extraordinary maintenance and so on. Thanks to this innovative system, companies of SMI customers can easily identify the main causes of downtime of the production line, obtain an improvement in the overall efficiency of the same and reduce the time for plant maintenance and format changes. It is also possible to obtain a structured report to perform cross-functional analyses.

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### Heavy-Duty, Nestable Rackable Pallet

Tosca, a leader in reusable packaging solutions and pooling for supply chains, introduces the NeRa Pallet. A nestable, rackable and stackable heavy-duty plastic pallet that can deliver efficiencies throughout the automated distribution supply chain.

The NeRa is the first plastic pallet engineered with PowerDeck™ strength and fitted with SureFoot™ legs for seamless automation. It is rated for static loads of up to 3000kg and is fully nestable – a combination that increases storage capacity while reducing space requirements by up to 2.5 times compared to wooden pallets.

Jesse Sels, President EMEA at Tosca, explained, "There are plastic pallets that can carry similar weight in a rack as the NeRa, but this is the first time this kind of strength has been available in a nestable pallet. This nestable design, combined with a high strength-to-weight ratio and long service life, makes the NeRa a more cost-efficient and sustainable solution than wooden pallets in virtually any warehousing and distribution application. Its robust construction and highly consistent dimensions mean the NeRa is ideally suited to automated handling systems. These benefits are particularly clear during the 'last-mile' outbound delivery of goods into retail."

Made from 100% HDPE, NeRa pallets are also damage- and germ-resistant for cleaner overall operations. They require no heat treating and fewer washer trips.

Each plastic NeRa pallet is of uniform weight and size (800 x 1200 x 157mm). The SureFoot wide lateral legs ensure seamless transfer over conveyors and can be swapped in and out easily and quickly. Supplied with high visibility green legs, the NeRa helps forklift operators navigate loaded pallets safely in the high rack.

Available only for pooling and rent, NeRa pallets are compatible with all standard 100mm and 150mm conveyor roller pitches and fit all standard pallet racking types.

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