

# THE NEW SK ERGON: WHEN TECHNOLOGY MEETS THE ERGONOMIC DESIGN



From processing to packaging technologies, from ingredients to food safety up to logistics and handling: Anuga FoodTec trade show, held in Cologne last 24-27 March, is much more than this. On the occasion of this important rendezvous SMI showcased their innovations in the packaging sector, the latter having to keep up with

new market trends with the aim of ensuring competitiveness, efficiency and flexibility with special consideration to energy savings and eco-sustainability.

These are the principles on which SMI most innovative studies are based and that came into effect in the realization of the new SK 500F shrink-wrapping of the ERGON series, showcased in world premiere at Anuga

Foodtec.

**Ergonomics, technology, robustness, modularity, etc.** These are only some of the elements featuring the new ERGON series.

What presented in Cologne was just a preview of the new range of primary and secondary packaging machines manufactured by SMI. By launching this new machine series, SMI is making a breakthrough





in their history which has its starting point in the SK automatic packers, that is the product that has always distinguished itself for high performances, top-level reliability and operational flexibility.

**A new style marked by ergonomics and technological innovation**  
The new SK packer exhibited at Anuga FoodTec features a stainless-steel frame, that is the ideal solution for the food sector being the stainless steel an

acid-resistant material for products like tomatoes, milk, etc.  
The new curved style of the sliding doors installed on the SK 500 F ER-GON shrinkwrapper and

the new “orobie” grey color immediately recall the high level of technology typical of the machines produced by SMI. The curved style enables to position every motor



externally with respect to the mechanical groups they activate, which makes maintenance interventions easier for the line operator. Furthermore, the doors closing system is equipped with a decelerating device that slows down the move in the final phase of the closure to avoid sharp collisions that may cause damages.

The ergonomic frame of the new SK ERGON enables the operator to easily manage all the activities related to both the use and the maintenance of the machinery, following the highest safety standards.

There's no contact between the moving parts and the packed product, since the threaded bars on which the adjustment devices of guides and chains run are placed in a protected area preserving them from dirt and dust. Moreover, SMI shrinkwrappers do not need geared motors, as they are activated by brushless motors (driven by digital servomotors) directly connected to the transmission shafts with the subsequent advantage of

reducing energy waste, noise and maintenance.

### **The new ST ERGON shrink tunnel**

The innovative process involving the new SK ERGON did include also the primary element of the shrinkwrapper, that is the shrink tunnel. SMI shrink tunnels are state-of-the-art machinery enabling the reduction in energy consumption, the best environmental compatibility of processes and the qualitative enhancement of the packaged product.

Thanks to an accurate analysis of thermodynamic events generated by the shrinking process, SMI tunnels are capable of handling in an efficient and homogeneous way the distribution of hot air flows on the whole area of the pack.

In the new ST ERGON version the air adjustments have been further increased, making the heat flow direction more precise and thus enhancing the final quality of the pack. In addition to this, packs undergo an immediate cooling process which, by means of a series of fans placed at regular 1-meter intervals in

the oven, fixes their shape, look and rigidity to prevent deformations or damages during the following packaging steps. At the exit of the shrink tunnel a conveyor connects the oven belt to the conveyor belts; this connection is ventilated so as to enable the right thermic transition of the pack. On the final section of the oven belt some cleaning brushes in vetronite are installed so as to remove possible dirt from the conveyor belt. SMI shrink tunnels are designed to ensure the operator an easy and totally safe access to the internal parts of the machinery during cleaning and maintenance operations which are extremely reduced if compared to traditional systems.

Moreover, the new oven of the ST ERGON series is equipped with a small switchboard positioned in the lower part of the tunnel under the outlet conveyor belt, that is an area that the operator can reach easily in case of interventions. In the end, a special measuring unit placed out of the tunnel ensures an immediate and detailed check of energy consumption. 🏠

