COMPACT PACKAGING MACHINES WITH 90° INFEED

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large, for containers of different capacities. Currently the available variants are:

• **BO-I**: for productions up to 80 introductions/minute (*): ASW 80-I F/P/T, ACW 80-I and AFCW 80-I models

• **ISO-I**: for productions up to 150 introductions/minute (*): ASW 150-I F/P/T, ACW 150-I and AFCW 150-I models

(*) Variable according to the exact shapes and sizes of the containers.





> COMPACT AND VERSATILE PACKAGING MACHINES

SMI's new packaging machines are well suited to the dynamism of numerous companies in a wide range of sectors, first and foremost the "food & beverages" sector, which, in order to face growing competitiveness, must adapt to modern lifestyles and consumer demands for numerous pack formats, small, medium or

Born from the need to manage a wide variety of formats on the same packaging line, the new packaging machines with 90° infeed are characterised by the reduced dimensions of the feeding system and the simplicity of format changes.

SYSTEM **OPERATION**

feed the shaped containers smoothly and keep them in the correct position, it is not possible to use the mass flow introduction system, but a system is needed, that maintains the correct orientation of the same throughout the production process. Where there are no space problems, it is possible to introduce a divider/ laner to correctly convey the containers to the infeed of the packaging machine, but this solution requires a greater investment due to upstream and downstream conveyors, justified only if only shaped containers are processed. On the other hand, the ASW, ACW and AFCW packaging machines, equipped with a singlelane infeed belt, have the considerable advantage of not requiring the presence of a

divider for the laning of loose products. Format changeover operations can be completed quickly and in a simplified manner, because it is possible to process different types of containers, to vary sizes, without having to resort to additional equipment.

In the pack-forming area, a sorting device groups the correct number of containers before the packaging operation. The product infeed system is in a continuous cycle and the pack formation takes place by means of synchronised dosing belts with brushless motors (models 80-I) or by means of an electronic separator (models 150-I).

Subsequently, the loose products are transferred from the feeding conveyor to the packaging conveyor belt by means of a

Cartesian axis system (models 80-I) or a rotary system (models 150-I). In the models that are used in a pad, tray or box, a rotary picker consisting of two groups of suction cups with an electric suction system picks up the dies from the cardboard magazine. The tray forming machine operates continuously and the unwinding of the film (where provided) is managed by the cutting unit (models 80-I) or by brushless motors (models 150-I). The splicing of the film at the end of the reel is done by means of a manual sealing bar.



ERGONOMICS AND SAFETY OF OPERATIONS

For SMI, innovation also involves ergonomics, which, in the workplace, plays an increasingly important role in protecting the health and safety of line operators.

The single-lane infeed, preferably positioned on the side opposite the operator, facilitates the correct laning of loose containers onto the conveyor belt equipped with thermoplastic chains with a low friction coefficient. For models that have it, the cardboard magazine is located next to the operator, for a more ergonomic, simple, fast and safe loading of cardboard.





TO HANDLE BOTH CYLINDRICAL AND SHAPED **CONTAINERS IN A WIDE VARIETY OF FORMATS**

hen it is necessary to pack containers of different sizes, both cylindrical and shaped, within a bottling line, it is essential to have a versatile, compact system that is easy to manage and use, especially if multiple pack configurations are to be worked with the same machine.

To meet these needs, SMI has launched a whole range of new packaging machines with 90° single-lane infeed:

> ASW ERGON (Angular Shrink Wrappers)

 Packaging in shrink film, pad+film, tray only, tray+film

 Infeed with single-lane conveyor and 90° product feeding system

 Double-belt product separation system driven by electronic axis

 Vertical cardboard magazine

 Alternate motion cardboard blank picker

 Film unwiding controlled by te cutting blade motor (ASW 80-I) or by the brushless motor of the reel holder (ASW 150-I)

 Manually (ASW 80-I) or automatically (ASW 150-I) phased tray forming unit

 Single film reel (ASW) 80-I), double film reel (ASW 150-I)

> ACW ERGON

(Angular Carton Wrappers)

 Packaging in wraparound case and WP tray

 Infeed with single-lane conveyor and 90° product feeding system

 Double-belt product separation system driven by electronic axis

 Vetical cardboard magazine (ACW 80-I), Easy-Load horizontal cardboard magazine (ACW 150-I)

 Alternate motion cardboard blank picker

 Manually (ASW 80-I) or automatically (ASW 150-I) phased tray forming unit

 Case sealing by means of hot melt glue

ASW, ACW, AFCW 80-1 / 150-1 | 48

> AFCW ERGON

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(Angular Film Carton Wrappers)

 Packaging in wraparound case, tray only and tray+film

 Infeed with single-lane conveyor and 90° product feeding system

 Double-belt product separation system driven by electronic axis

 Vetical cardboard magazine (ACW 80-I), Easy-Load horizontal cardboard magazine (ACW 150-l)

 Alternate motion cardboard blank picker

 Film unwinding controlled by the cutting blade motor (AFCW 80-I) or by the brushless motor of reel holder (AFCW 150-l)

 Manually (ASW 80-I) or automatically (ASW 150-I) phased tray forming unit

 Single film reel (AFCW) 80-I), double film reel (AFCW 150-I)

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FLEXIBILITY AND EASE OF USE

ith the single-lane infeed it is possible to process different types of containers, of various sizes, without having to resort to additional belt equipment, with the advantage that format changes are quick and easy as there is no need to adjust the guides of the various lanes.

The film cutting unit (for the ASW and AFCW series), with a compact design, is equipped with a blade managed by a brushless motor with direct "direct-drive" transmission, which improves the precision and accuracy of the cut and simplifies maintenance operations.

The user-friendly adjustment is facilitated by the POSYC® control panel, sliding on a track along the entire length of the machine, which allows easy and efficient use of the packaging system. This is possible thanks to the extremely intuitive graphical interface, the touch-sensitive screen and the advanced real-time diagnostics and technical support functions present on the POSYC®.





THE ADVANTAGES OF THE NEW SMI RANGE:

- single-lane infeed
- compact layout
- ease of use
- high flexibility to handle cylindrical and shaped containers on the same machine
- high versatility to process a wide variety of small and large formats
- suitable solution for production cycles that require frequent format changes
- for productions up to 150 introductions/minute
- quick and easy format changeovers
- easy maintenance.

DESIGN WITH US YOUR CIRCULAR PACKAGING



IMPROVING YOUR CARBON FOOTPRINT IS EASY WITH SMI!

Our bottling and packaging systems benefit from Industry 4.0 and IoT technologies, can process recyclable materials such as rPET and allows for considerable energy savings.

Find out our solutions for packing a wide range of containers up to 50,000 bottles/hour.







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