

MONOBLOC CASE PACKER WITH PICK & PLACE SYSTEM

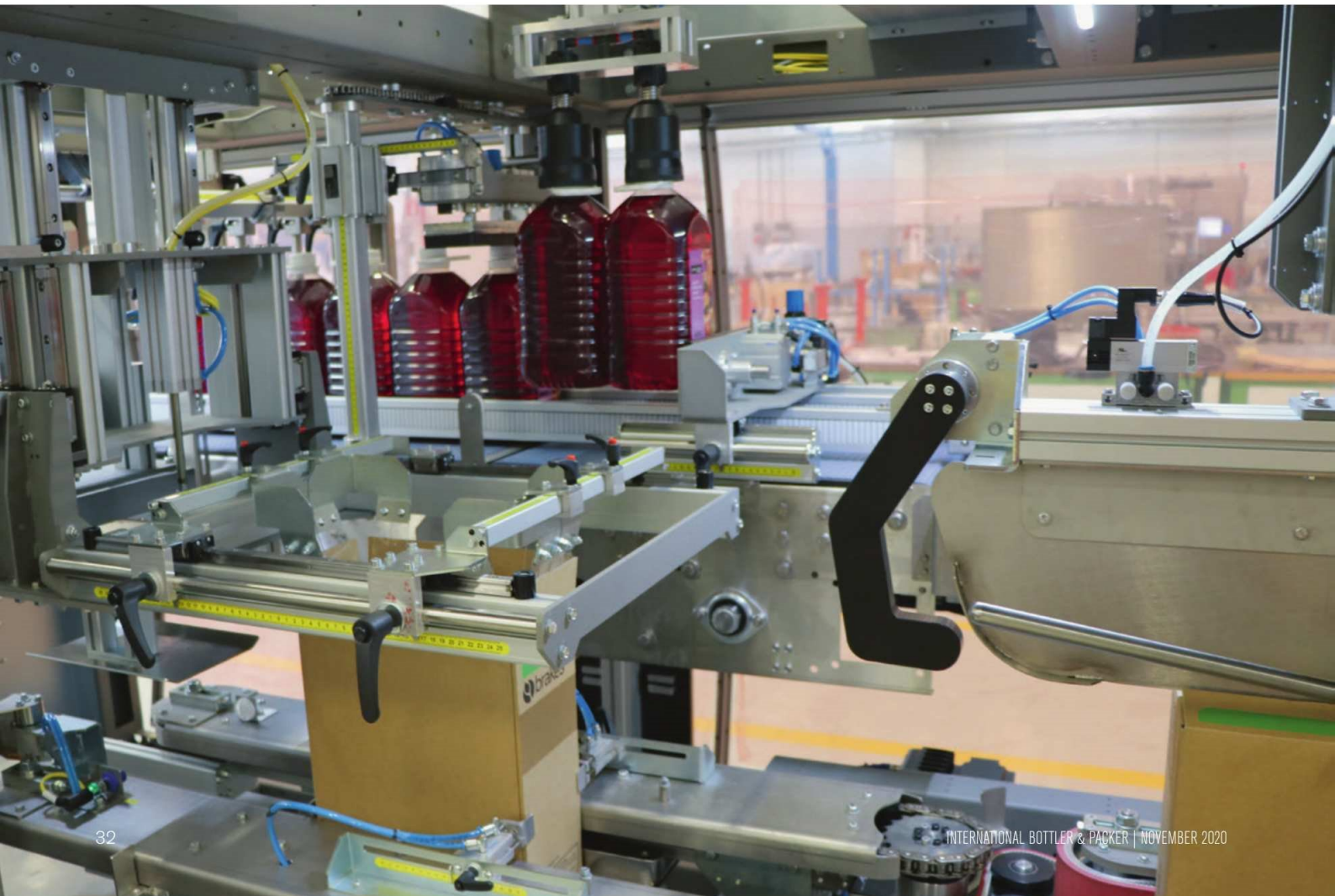
WITH THE LAUNCH OF THE NEW RANGE OF AUTOMATIC CASE PACKERS WITH PICK & PLACE SYSTEM FROM ACP ERGON RANGE, SMI ENTERED THE PACKAGING INDUSTRY IN RSC CASES, THUS PROVIDING CUSTOMERS WITH A VALID ALTERNATIVE TO TRADITIONAL PACKAGING SOLUTIONS IN WRAP-AROUND BOXES.

The increasing attention to the market needs makes it necessary to search for innovative technical solutions that take into account the paradigm of circular economy, thus allowing to reduce costs, save energy, increase competitiveness and improve

the market positioning. In the packaging industry, SMI offers solutions inspired by the concepts of Industry 4.0 and Internet of Things (IoT) that are increasingly efficient, flexible, eco-friendly, ergonomic, easy to control and to check.

SMI customers can choose between a wrap-around box and an RSC case. The latest investments in R and D made by the company in the secondary packaging in cardboard boxes have led to the birth of a new range of case packers, called ACP (American Carton Packer), suitable for making American style cardboard boxes (RSC) and equipped with a pick & place system for inserting the loose product into the package.

The choice between a wrap-around box and an RSC case depends on several factors related to the product to be packaged, to commercial strategies, to logistics and distribution needs and to the speed of the production line. Other factors that have to be taken into account are for instance the weight and the shape of containers, the palletizing patterns, the marketing objectives, the budget available and the need or not to display the package on the shelves of retail points.



The Advantages of ACP Series

The new ACP case packers feature a solid monobloc structure that combines all the machine functions: product separation, product insertion with top loading system, carton magazine, box sealing.

The packaging process is alternate (stop & go) by means of a pick & place system capable of making RSC packs at the maximum speed of 20 p.p.m. (depending on the format).

Versatility of Use

ACP range can pack several types of products, such as bags of pasta, rice and coffee, as well as oval containers (shampoo, liquid soap and detergents) and briks (tea, juices), simply by changing the gripper/suction cup.

Thanks to the pick & place system, the new SMI case packers are suitable for packing very delicate and exclusive products, such as wines, sparkling wines and liqueurs, without damaging the label of glass bottles during processing in the machine.

Thanks to the extreme versatility of ACP series, the products to be packed can also be stacked inside RSC boxes, that, furthermore, are very robust and resistant (high top load).

The carton magazine is placed next to the machine, thus allowing to load the pre-folded blanks in an easy and ergonomic way.

The new SMI pick & place packers are equipped with MotorNet System® automation and control technology, based on Sercos fieldbus, that makes the plant fully compliant with Industry 4.0 and Internet of Things (IoT) principles.

The ACP Ergon models are available in two versions: with tape sealing (ACP S) or hot melt glue sealing (ACP G).

Technical Features

- Alternate packaging process (stop & go) through pick & place system capable of making packages at the maximum speed of 20 p.p.m. (depending on the format)
- Grouping of products in an alternating cycle, through a pneumatic separation system
- Carton magazine placed next to the machine with easy and ergonomic loading of the pre-folded blanks
- Packaging in American style cardboard boxes (RSC) with loose product top loading
- Possibility of stacking the product in the box during its insertion
- Possibility of packaging several types of products, such as bags of pasta, rice, coffee, as well as oval containers (such as shampoo) and briks (tea, juices, etc), simply by changing the picking gripper
- Possibility of processing delicate products, such as wines, sparkling wines and liqueurs, without damaging the label during processing in the machine
- Easy Machine Access
- Reduced mechanical wear and maintenance
- MotorNet System® automation and control technology based on Sercos fieldbus

Depending on the model chosen, the box is closed by means of adhesive tape or hot glue. The model with glue pack closure is equipped with a lower glue unit and an upper glue unit with double spray that ensure excellent pack sealing. At the machine outfeed, special lateral upper flap-folding devices driven by a semi-rotary cylinder keep the walls of the newly made box pressed.

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British Plastics Federation Response

Leaving the environment in a better state for future generations is extremely important and programmes like War on Plastic are rightly encouraging people to think about how everyday decisions can make a difference. However, calling a programme 'War on Plastic' does not suggest a balanced evaluation of a complex situation and seems to suggest that the material should be condemned in all applications. In fact, plastic is an enabling technology that is vital to almost every major industry. As we have stated before: the enemy is not plastic, the enemy is plastic waste.

The unnecessary use of any material is wasteful and all materials have an environmental impact. The programme did not explain why plastic was used in the first place within a number of packaging applications. The raw materials for glass and metals need to be mined and trees need to be grown to produce paper bags and paperboard. All this requires land, energy and water. Plastic is resource efficient, meaning packaging designs are able to use a very small amount of material. It also performs well when materials are compared using lifecycle analysis, which compares a range of environmental factors, including energy and water use. One study found that a world without plastic packaging would result in 2.7 times more greenhouse gas emissions.

The programme suggested that there had been an increase in the use of single-use plastic packaging but in the past two years the actual tonnage per capita of plastic packaging placed on the market has fallen by 4%. A forecast done by the industry, key stakeholders and compliance companies expects per person use for all plastic packaging to fall further in 2020, possibly falling as much as 9% in comparison to 2019. This reflects a complex picture, where consumer behaviour is changing and numerous industries have experienced a significant fall in demand for their services and products.