



# cama news

## CONFECTIONERY

RECYCLED PAPER



### Make it easy with robots

Confectionery is a demanding Industry: fragile and sophisticated products are produced on high speed production lines. Products are often a reward for consumers looking for a break during a stressful day, therefore they must be perfect, because food is eaten with the eyes first. Cama has a high level of experience in confectionery with many machines installed globally, many with unique packaging solutions developed in partnership with our customers.

The consultative approach is the key of many Cama turnkey projects. The objective was to handle 220 fragile, chocolate oranges. 7 robotic stations work synchronously to form the boxes (2 units), place the Oranges into the blisters (1 unit), load the blisters with the Chocolate Oranges into single-flap re-closable boxes (1 unit), close 12 boxes in each cycle (2 robotic stations), pick up 24 boxes to load 2 carton trays at a time each with 12 pieces (1 robot).

The process, in detail, starts with boxes made from flat blanks by a 7-head robotic forming unit. This delicious and delicate product has to be handled carefully to preserve its quality, so each of them is gently placed into a blister by a robot.

The protective blisters with the choco-orange inside are then handled with robots to pick them up and load them into a re-closable box. The boxes, which are the consumer units, are

then collated and loaded in groups of 12 into a carton tray, to be presented "shelf-ready". The careful but positive product handling preserves this sophisticated chocolate orange from any damage. Everything automatic, everything carried out with robots, everything engineered by Cama.



● Complete Packaging Line





# Flexible compact packaging line for twist-wrapped chocolate bars

The following is a clear example of Cama's capability of compact and versatile solutions to develop a top load packaging system that follows exactly the customer's requirements. In this specific end-loading solution, Cama is presenting a high-performance packaging line for the packaging of "twist-wrapped" chocolates arriving at 550 ppm, into three-flap display boxes with lids. This line includes a monoblock loading unit with an integral single

head forming machine, 5 Cama Delta robots, and a robotic closing machine for three-flap display boxes with lids. At the end of the line, a free-standing Cama IN type casepacker packs the display boxes into RSC shipping cases. For each Delta robot a specifically designed infeed system, equipped with a vision camera, detects the arrival of the products at 110 pcs minute per each robot infeed and assigns them to the Cama robotic loading unit. The robot

picks them up in groups of 5 and places them into the erected display box in 4 layers. Fast and accurate box closing at the monoblock exit, combined with simplified carton handling, is guaranteed by the box closing manipulator. The filled display boxes are then transported, grouped and loaded into the RSC case, previously erected from a folded and pre-glued case. The main advantages of this innovative application can be summarized as follows:

- Compact solution with reduced footprint and flexible modular configuration to suit the specific lay-out requirements.
  - High flexibility with automation of various production lines working simultaneously.
  - High level of operator's accessibility with full internal visibility on all sides.
- The further benefits include a higher level of OEE, process safety, future-proof format flexibility and hygienic design.



● Vision guided Robotic Unit



# Bags with hard and soft candy: pack them the right way

Whether you have a stand-up pouch or a bag containing hard or soft candies, the Cama FW wrap-around casepacker is the best way to load them into a display box. Cama's positive product handling guarantees maximum care during the collation and loading process, so that even shaped and fragile candies are gently handled by the wrap-around machine. The highly versatile Cama FW748 with Break-Through Generation machine frame enables you to form a tray, wrap-around display, or a more economical case. The modular design allows future extensions to the frame to enable the forming of a 2-piece "SRP" shelf ready pack. The FW series with PLC-less technology is the "all in one" machine that responds not only to today's requirements, but is ready to serve your future market possibilities.



● Wrap-around Case packer





## Modular approach for EOL applications: the key to success today

Replacing a manual packing line with a more efficient automated solution has been the key factor of this project, ensuring a more stable and reliable production volume utilising a modular line that can be adapted to different speeds and products. Cama offers versatile and scalable solutions that enable producers to optimize their investment facing the requirement of modular production rates (multiple machines linked to the same packing unit), formats and configurations.

Cama approach is to provide the end user with "simple and efficient" solutions, with the aim of responding to both current demands and future marketing developments. Gentle and reliable product handling, combined with the capability of the machine to be automatically set to the actual production flow in line with upstream equipment, were the key factors that made Cama the right choice for the Customer. Originally a single-size fully manual production of display trays, with the

introduction of the Cama solution, it has now become a packaging platform with integrated product quality inspection, buffering and the combination of 9 stick wrapping legs to 2 tray packers. Future flexibility in terms of product sizes and packaging collations has been considered as a key factor in validating the investment. When this major player and leader in local confectionery markets was looking for a partner able to provide scalable solutions with the capability to manage a

highly demanding project from the investment and automation point of view, Cama provided a solution to optimize investments, footprint and engineering support. Together, the client and Cama, developed various complete line structures, continuously following marketing briefs, throughput and configurations, space and safety constraints. This was further enhanced by achieving the KPI's of operation and format change times, combined with a higher level of security requirements.



● Monoblock Loading Unit

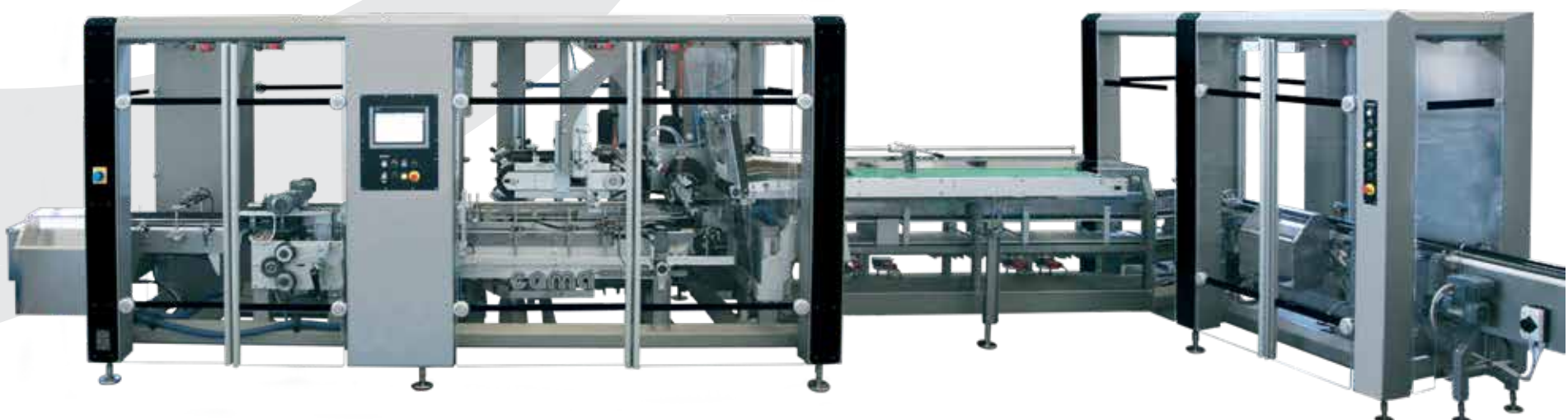
## Snack packaging: maximum flexibility and high speed

In the energy bar sector of the global snack market, there has been an increase in demand in recent years to meet a wider range of brands and type of products. Portability and flavour variety are among the main market drivers and both the snack food manufacturer and the co-packer need to share the investment on secondary packaging equipment to cover

a wide variety of products and formats. What is required from packaging equipment is the capability to offer maximum performance, in terms of speed and flexibility. The high-speed cartoning machine developed by Cama includes state of the art technology to meet such requirements, and is capable of handling a wide range of products and pack them into

a variety of configurations and product counts, with error-free, short changeover times with simplicity of operation. This specific solution demonstrates an intermittent-continuous motion horizontal cartoning machine, from the Cama CL series, capable of reaching 350 flow-pack bars per minute and up to 80 cartons per minute, depending on the count per carton

and configuration. Thanks to the innovative infeed belt conveyors, combined with race-track pocket conveyor technology, the machine can group and load the products into the cartons both "on the edge" (typical application for single-serve and vertical display box) and "flat and stacked" (for retail display boxes or consumer boxes).



● Side Loading System



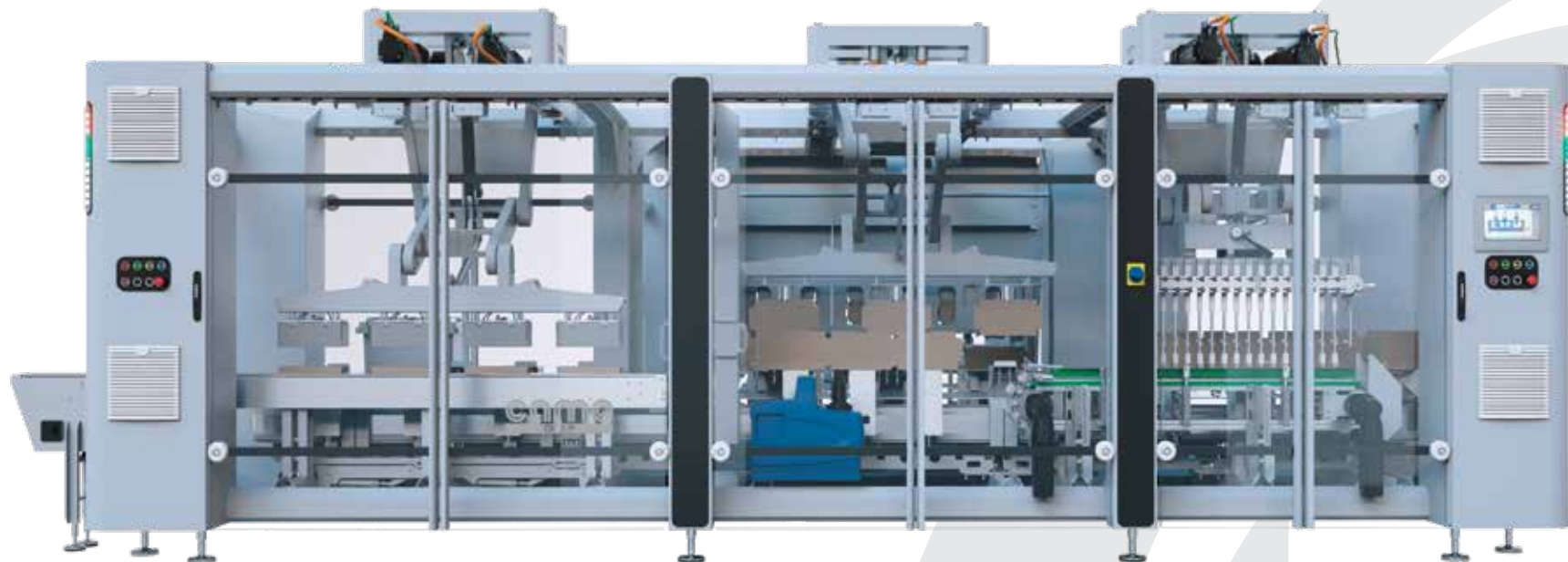
## High box output in robotic monoblock

Chocolate bars top-load system in three-flap boxes on Cama IF318. Handling 450 bars a minute is normally a relatively easy task. But if the count per box is small, box forming is a little more complicated, and box closing requires specific knowledge in packaging automation. The box height is lower than normally expected

and the forming assembly has to be specifically engineered to suit. Easy opening boxes. In this case with 4 pcs per box, a 6-robot forming unit is preparing more than 100 box per minute. The boxes are then filled with flowpacked bars using a Cama pick & place robot. Once the 3-flap boxes are filled, they pass through

a high speed robotic closing station. At the end of the machine a robotic closing unit ensures perfectly closed and square boxes to complete the task all in one frame. The box phasing unit is designed to wait for each phase of the process (forming, loading, closing) and is perfectly integrated into this high technology

monoblock. Low changeover requirements and clean in-line design make this machine a market leading product supporting many of the markets leading global producers.



● Monoblock Loading Unit



**cama**  
GROUP

The Cama Group's Mission, based on the Company's Total Quality Process System, is oriented towards customer satisfaction and supplier partnerships. Our Logo represents the perfect union of the three rings: Customer, Supplier and Cama.

**CAMA 1 S.p.A.**  
Via Como, 9 - 23846 Garbagnate Monastero (Lecco) - ITALY  
Tel. +39 031 879811 Fax +39 031 856373  
commerciale@camagroup.com  
www.camagroup.com

**CAMA NORTH AMERICA**  
901 Corporate Grove Drive  
Buffalo Grove, IL 60098  
Tel.: +1 847 607 8797 Fax: +1 847 607 8403  
camaNA@camagroup.com

**CAMA UK**  
CAMA 3 L.t.d.  
Suite 44, Berkeley House Hunts Rise,  
South Marston Park Swindon, SN3 4TG  
Tel. +44 01793 831111 Fax +44 01793 831481  
cama3@camagroup.com

**CAMA ASIA**  
88, Keyuan Rd, Zhangjiang Hi-Tech Park,  
Room 636A, Tower 3, Pudong, Shanghai, PRC  
Tel. (+86) 21 58385308 - 58385210  
camachina@camagroup.com

**CAMA FRANCE**  
CAMA 2 S.a.r.l.  
4 rue de Lamirault, Lot A4, 77090 Collegien  
Tel. +33 01 8235 0530 Fax +33 01 8410 7430  
cama2@camagroup.com

**CAMA AUSTRALIA Pty Ltd**  
17/5 Enterprise Drive  
Rowville, VIC 3178  
Phone +61 401 991 255  
cama-AU@camagroup.com

