



cama NEWS

BAKERY

RECYCLED PAPER



One sole supplier for both packing machines and robots

Since 1981 Cama have been developing, manufacturing and installing secondary packaging machinery around the world, conceived in various configurations to meet all your special needs and requirements. We represent the ideal partner in the Bakery market sector, being able to supply both packaging machines and robots that are specifically engineered for the packaging business. The Cama robotic applications feature fast, optimal and gentle-handling solutions that are proven not to damage even the most delicate products, and incorporates a Smart Vision

System that optimizes the management of the product by automatically selecting products according to pre-established dimensions and arrival speed. A complete flexible line for the bakery industry show-cases Cama's latest Break-Through Generation (BTG) systems. The impressive features of the new BTG models are the reasons why Cama has been able to make a step change in innovation in secondary packaging machinery.

The very latest technological innovations by CAMA Group mark a milestone in Research & Development, raising the standards in

packaging automation.

• Higher Hygiene Standard:

- No hollow body;
- No horizontal surfaces;
- No water/dust/dirt retention;
- No tie wraps;
- Easily identifiable contamination;
- Easy cleaning.

• Open Profile:

- No bundled cabling (ICR, Integrated Cable Routing).

• Safe «Easy Entry» and Ergonomics:

- Zero «unsafe» Access;

- Increased accessibility.

• Flexible Frame and Reduced Footprint:

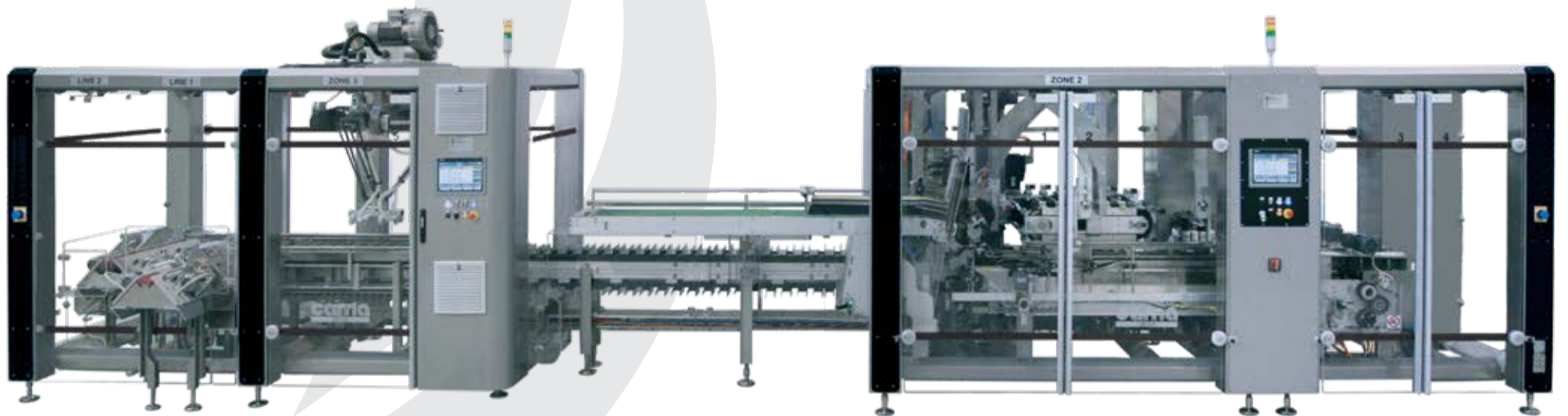
- Flexible modular configuration to better suit machine and factory layout requirements;
- Cabinet-free technology;
- Optimization of floorspace.

• Energy Saving Engineering:

- Optimized system design and components selection to reduce energy consumption.

• Fool-proof Size-Change parts Recognition:

- User-friendly, fast and tool-less changeover;
- Reduced start-up time after changeover.



● Delta Loading Unit and Cartoning Machine

This is a complete system for handling of flow-packed crispy bread in piles into pre-glued cartons. The line, sold to a global leader in the food sector, incorporates a Cama Triaflex Delta robot top-loading unit with a high-speed continuous motion cartoner. The combined system is designed to handle 2 different product types in several loading configurations. Flowpacks are delivered up to 600 pcs/minute to the CAMA line, where they are received by a

vertical race track. The Cama Delta robot picks the flow wraps and places them in the right orientation onto the conveyor of the cartoning machine. The robot creates the necessary loading pattern, giving the opportunity to handle flat and on-edge configurations, with or without product rotation within the carton. The Continuous motion cartoner side-loads the groups of flowpacks into pre-glued cartons. Speed can range, according to the different

products and configuration, from 80 to 200 cartons per minute. A key winning factor for the customer is the ability to future proof the guaranteed return on investment (ROI) through the modular construction of the line, use of off-the-shelf and standardized components, and the capability to have the addition of a second loading unit in the future – providing an easy upgrade for additional production capacity. Versatility, reliability and

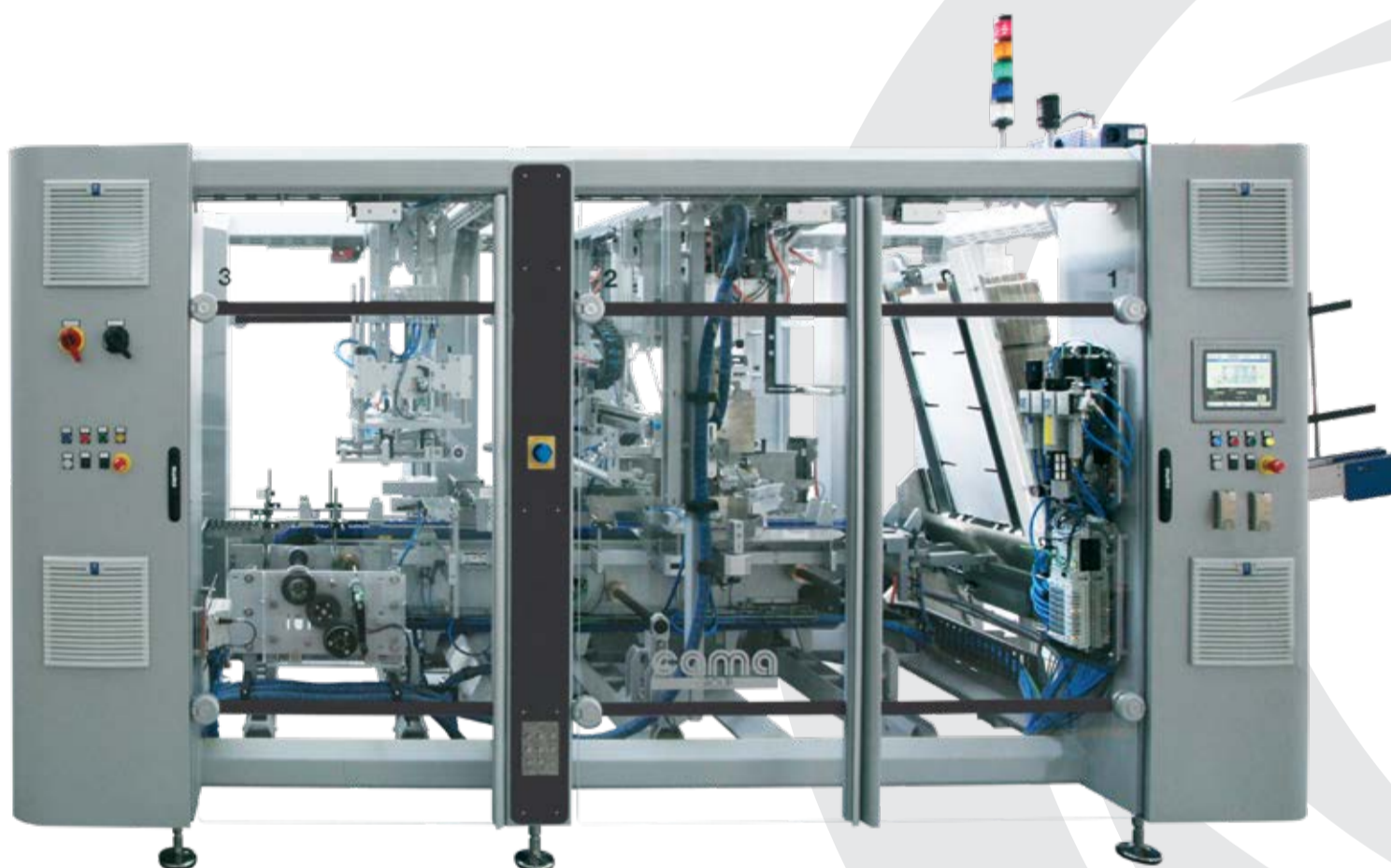
ease of size change are standard components for a Cama installation. This line is a great example of Cama's Unique Selling Proposition, providing Experience, Technology and Service with the combination of 4-axis robots and high-speed cartoners under the same hardware and software platform.



Case Packing Systems for RRP: get the right display!

With over 35 years experience in case packing applications, Cama's innovative solutions for RRP (Retail Ready Package) provide a wide range of successful machines developed over the years. The Cama FW and IN electronic case packers are capable of packing a variety of products into RSC cases, one-piece wrap-around or two-piece display cases for retail-ready packaging solutions.

Whether you have hard products such as biscuits, with or without chocolate, or soft cakes, grains or chips the Cama wrap-around case packer is the best way to load them into a display box. Cama's positive product handling guarantees the maximum care during the collation and loading process so that even fragile and shaped products are gently handled by the wrap-around machine. Highly versatile, Cama FW series enable you to form trays, 2 piece Retail Ready Packs or full wrap-around cases: all in one machine, with easy, tool-less format changes.



● Wrap-around Case Packer



Customized and flexible solution easily adapted to any layout requirement

This picture shows a very compact monoblock unit, incorporating forming, loading, and closing, within a footprint of only 2x3 meters, combining both flexibility and high productivity. The products (flow-wrapped baked slices) arrive on a single lane at a speed of 400 pcs/minute, are spaced by special accelerating conveyors and, by means of a twister belt, positioned on edge into the pockets of a vertical race tracking system.

The collated products are then picked by a Cama Triaflex delta robot with bespoke designed gripper head and loaded into trays or display boxes; the packaging is formed by an integrated electronic erector and phased into the loading area. After loading, the boxes are transferred to the closing station, where an integrated electronic closing machine folds and glues the lid. The loaded and closed boxes then exit the machine outfeed.



● Monoblock Loading Unit



Unrivalled solution

This particularly compact system has been specifically designed for a private label manufacturer to pack pillow bags of biscuits into an RSC case in a laying configuration. It is made up by a case erecting machine, a 2-axis robot and a lidding machine all included in a monoblock modular system. This solution

integrates a product configuration loading unit with triaflex robots and a smart vision system to suit various case patterns. Products arrive on one or two lanes and are conveyed to the unit infeed where two vision guided robots sort and pick loose products and prepare the requested layer configuration. The grouped products are

then collected by a two-axis robot by means of a pick-up head and loaded inside the RSC case previously erected. Loaded packages are then transferred to the sealing unit where the top flaps are folded and closed. 11 different formats in RSC Case styles are handled up to a max speed of 120 products per minute.

Downtime for size changing is drastically reduced through this innovative concept. This unique solution proposed by Cama features an approx 30% reduced footprint compared to the standard systems currently on the market.



Cama Group: Vision for biscuit packaging

Thanks to its Delta robots with artificial vision, Cama recently installed a complete system for handling flowpacked biscuits either in trays or in piles. The different formats are first loaded into a preglued carton by a high speed continuous motion cartoner, and then the products are top loaded into shipping cases. Versatility, easy change over and reliability are the key words of this Cama installation.

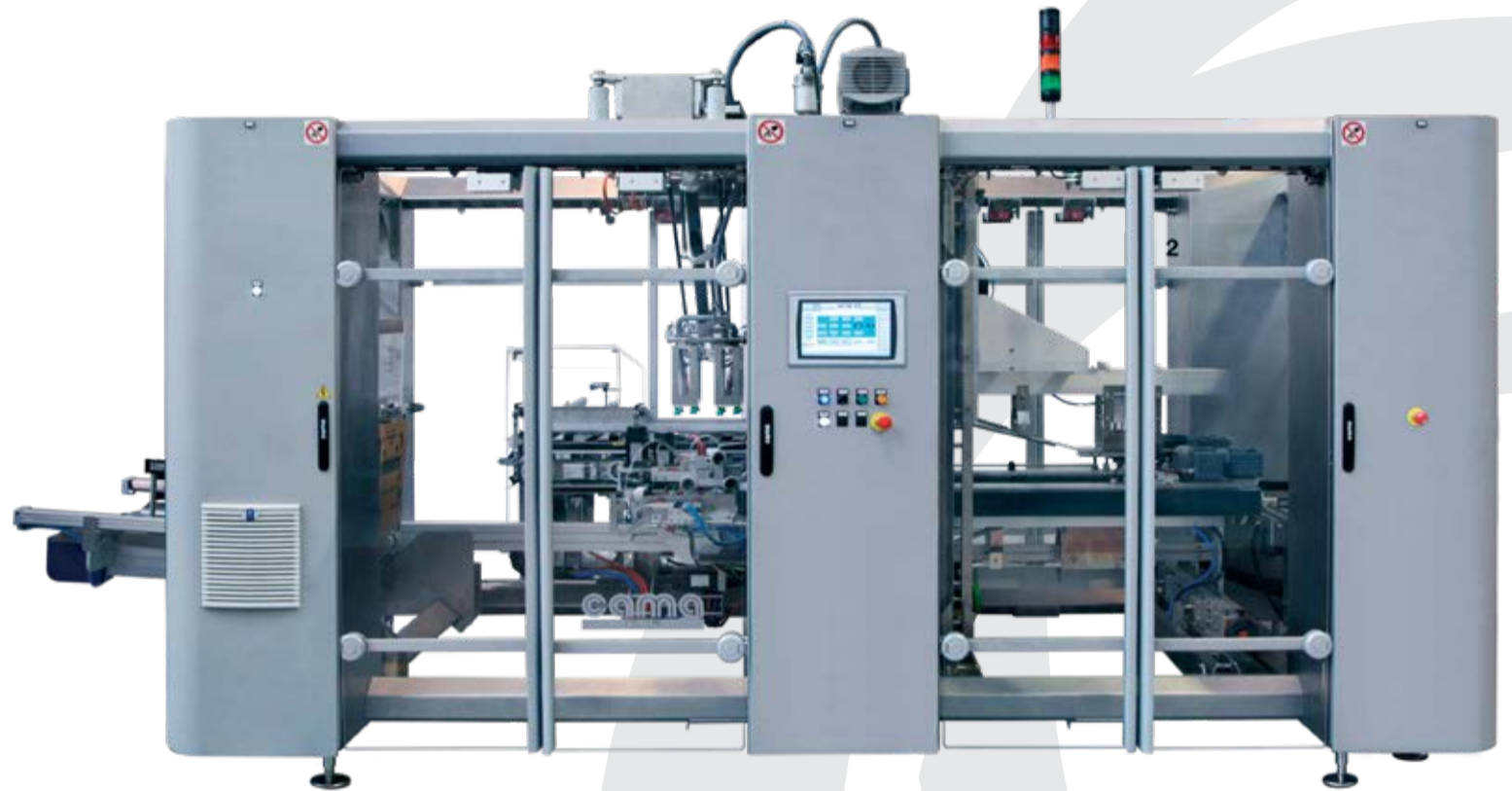
The system was designed to handle multiple different product formats. Biscuits of different dimensions are delivered to the Cama robotic loading unit on a flat conveyor. Up to 500 biscuits a minute arrive in flowpacked piles of 3 units or in flowpacked trays.

4 Cama Delta robots, driven by artificial vision, check the incoming products, pick them up and place them in the right orientation onto the conveyor of the cartoning machine. The robots create the necessary loading pattern, for instance a multi-portion pack composed by 3x2 piles of biscuits, or a single flow wrapped tray to be loaded into the preglued carton.

The continuous motion cartoner, model CL169, side loads the trays or collations of piled biscuits into pre-glued cartons, the flaps closed and sealed by hot melt glue. Speed can range, according to the different products and

configuration, up to 150 cartons per minute. Case packing is done by a Cama IF294: a monoblock unit, which combines case erector, 2-axis top loading unit and case closer in one single structure for the collating of the cartons and loading into shipping cases.

This line is a great example of Cama's capability to supply turnkey solutions, starting from the vision driven pick & place, integrating with high-speed cartoners and complemented by proven case packing solutions.



● Monoblock Loading Unit



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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.

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