







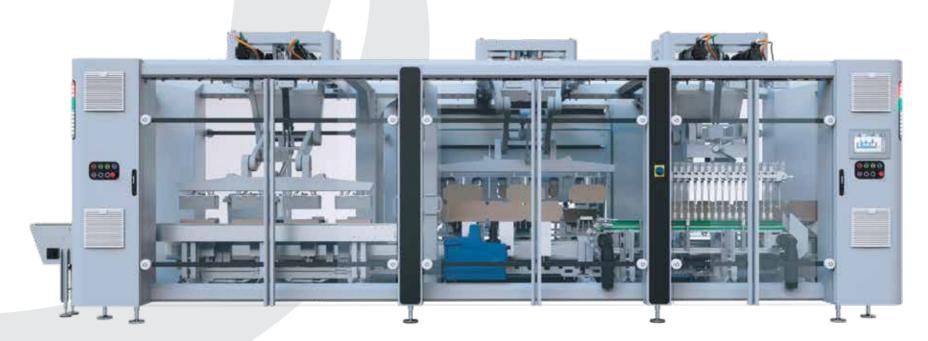
Packaging must be fit for purpose, safe, resistant and playful for children. The doypack or pouch follows these parameters perfectly. In addition, considering that market demand is to get new recipes, new shaped packages are both packed individually or grouped in a "family box" containing several recipes to attract children, sports or simply nomadic audiences. You have a brief on the current requirements of the food industry!

Cama offers versatile solutions that enable producers to optimize their investment in

fast-changing and highly demanding markets. Whatever the required production rates, formats and configurations, Cama proposes "simple and efficient" solutions, enabled from a modular approach, in order to respond to both current demands and future marketing developments. Cama has used its experience and decades of development to master product flow management and sorting solutions. Developed to handle high throughput of fragile products, the solutions are perfectly designed to group flexible packs into secondary or

tertiary packaging. In family box or "club case", flat, staggered or "top to tail"... On edge, vertically in transportation and presentation packaging at the same time, thus compact, resistant, handy and communicating to be put directly on the shelf; whatever arrangements required, Cama can cope with! When this major worldwide player in dairy products was looking for a partner able to provide complete and scalable solutions covering throughput from 60 to 550 pouches/minute with collation of 4 or more, mono or bi-flavours packs in

both family pack or in SRP in micro-flute, optimizing investments and footprint, Cama has established itself as a matter of course. As partners, the Customer 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.



Fully robotized Monoblock Loading System









Desserts on display. Top loading of sleeved glass jars into Shelf Ready Packaging

The IF Monoblock Loading Unit is composed of 3 modules (Forming - Loading - Closing) and has been designed to load cartons or sleeved glass jars, in various formats, into display cartons. By utilising the Top-Load principle Cama was able to re-configure the existing wrap-around packaging styles already in use

whilst enabling a significant increase in pack speeds which was required for the new high speed line. Furthermore the Top-Load principle allowed for easing handling of the various different formats (single & double layer sleeves) with simple change parts. The products are received on two infeed systems at a max. total

speed of 300 products/minute. An integrated forming unit erects the required boxes, while a twin vertical race track system collates the products in the required configurations. A 2-axis robot loads the collated products into boxes, which are then closed by an integrated closing unit and transported to the machine

outfeed. Integrated open flap detection and case reject on the outfeed ensures consistent quality outers are delivered to the automated palletising system.



Speed meets flexibility. Doubling the production volume while reducing operating costs

The new Break-Through (BT) Generation systems feature Cama's latest innovative technologies; these define a new standard in the world of secondary packaging for paperboard or corrugated cartons and cases, including enhanced hygienic design, cabinet free technology, adaptable modular configuration, ergonomic features, user-friendly controls, easy size changing and improved safety level. Such characteristics mark a milestone in Research & Development and are standard on

the full range of Cama machines and systems. One of Cama's recent BT Generation systems has been successfully installed by a major European player in dairy sector. The customer was looking to invest in a new production plant to double their production volume from a single production line to reduce their operating costs. Furthermore, the new line needed greater flexibility to run a wider range of formats and to help innovate with new packaging styles. Cama's solution was to engineer a complete

system, comprising of a high-speed MP sleever and an IF robotic loading unit, to pack sleeved glass jars of dairy desserts into Shelf Ready display cartons. Both machines belong to the new BT (Break-Through) Generation of systems. Thanks to 35 years of experience in the carton sleeving sector, with many successful installations in major multinational companies, Cama's sleeving machines provide flexibility, trouble-free running and high productivity. In the secondary packaging market of sleeving

machines, Cama's MP cardboard sleevers stand out for their technological innovation and high added value, including accessibility, ergonomic design, performance and functionality. They can pack (neck in and/or neck out) bottles, cups, jars, bricks, tins/cans and thermoformed containers from single and/or double lane in up to three product layers.

















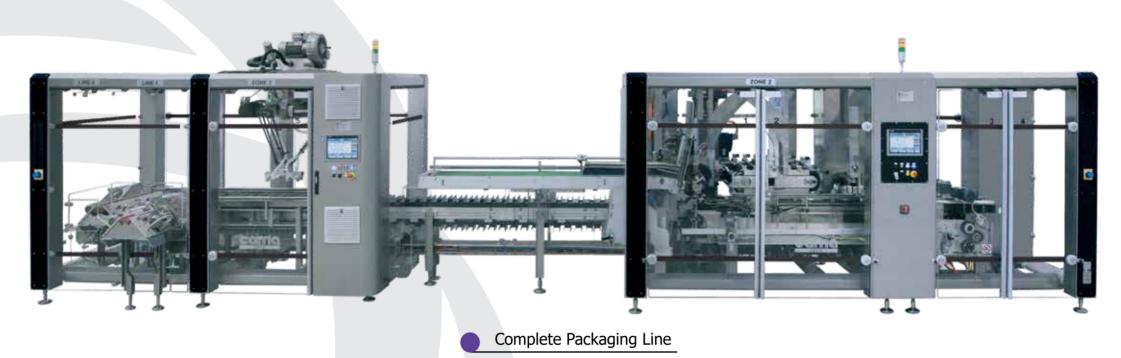
A complete line for baby food cartoning and case packing with spoon insertion

The combination of Cama Vision Driven Robots and Cartoning Machine ensures the highest level of flexibility in terms of packing configurations. This line is capable of packing up to 140 bags/min in various configurations (flat or on edge loading), with spoon insertion into the carton, with subsequent loading of the carton into wrap-around display boxes. The use of a robot for loading the spoons, instead of traditional mechanical feeders, allows the customer to have a wider range of gadgets to place into the cartons, without the

need of any changeover. A continuous motion cartoning machine ensures the smoothest product handling, combined with the safest carton loading. In addition, quick reliable and automated changeover was a key factor for the customer in making the investment, as the production has frequent changeovers and small production batches. The downstream Casepacker combines reliability and flexibility, being capable of packing cartons standing-up into shipping cases as well as into display boxes, single or double facing with different

case counts, according to requirements. A common HMI design for all machines, single source for all the consumables and spare parts, support provided by Project Management and Packaging Development departments, ensures Cama is a reliable and responsible partner for complex turn-key projects. All equipment is compliant with Industry 4.0 requirements, ready to be connected with "Cama App Line Supervisor", and to share production and efficiency data for continuous monitoring of the line performance.





Flexibility on the market: the keys to success today

Distribution and marketing have raised the bar for secondary and tertiary packaging, requiring high throughput, flexibility in terms of sizes and a clear brand identity. Tetra-bricks case packing makes no exception at all from this point of view: smaller counts for consumers, or bigger counts for distribution are a must to stay on the market in a sustainable and appealing way, package must be cheap and environmentally —correct, but strong and safe at the same time. CAMA offers versatile solutions that enable producers to optimize

their investment in fast-changing and highly demanding markets. Whatever the required production rates, formats and configurations, CAMA proposes "simple and efficient" solutions, enabled from a modular approach, in order to respond to both current demands and future marketing developments. CAMA has used its experience developing a solution capable of gentle handling of flexible products, combined with high speed of products ans cases, breaking into a world where single sized machines and repetitive production has

been the enstabilishment since years. Single brick or big shrink wrapped tray are not the only available packages choices anymore. CAMA FW748 machine is now covering the demand counts from 6 up to 24 into full wrap cases, with or without perforations for SRP presentation, as well as low wall trays covered then with shrink film afterward. When this major worldwide player in dairy products was looking for a partner able to provide complete and scalable solutions with the capability of providing turn key systems for the whole

tertiary packing, CAMA has established itself as a matter of course, optimizing investments and footprint and engineering support. As partners, the Customer 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.









Avant-garde solutions for dairy applications: flowpacks packed in a wide variety of formats

Working in close co-operation with customers on their production requirements, Cama offers real innovation with their products and services, providing comprehensive solutions to suit the production requirements of our customers and most importantly adding real value to their business line. The new IG machine series is part of the new generation of Multi-Delta Vision Guided Robotic Loading Units, capable of loading products into RSC cases, boxes, trays and other containers. One

of the latest and most interesting Cama Dairy applications has been realized with a complete robotic line to pack flowpacks of sliced cheese in various multi-layer collations, with optimized changeover time. This solution belongs to the new BT Generation Systems. It combines maximum flexibility with the highest equipment performance. This IG complete robotic line consists of an FA forming machine, a vision guided IG Robotic Unit, with four Cama delta robots, and a Double-head Lidding Machine.

The line is able to collect products arriving in primary packages from two lanes, loading the products into boxes in several different layer configurations according to customer requirements, subsequently placing them onto a dedicated conveyor leading to a separate Double-head Lidding Unit. With an infeed rate of 120 products per minute from each of two lanes (total infeed rate is 240 products per minute), the versatility of the solution enables it to load both small SRP cases, as well as larger

trays with side-walk closing, as requested from the main private label customers, and E-2 cases (plastic crates) that can be used for repacking. The line can perform multi-flavour configurations in smaller volumes, by loading boxes only partly, then adding additional flavors to complete the configuration before the lidding machine finishes the packing. After the IG line, boxes are delivered to a Cama Wrap-around and Display-box Casepacker, for final Shelf Ready Packaging.













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

CAMAUK

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, Shanghal, PRC Tel. (+86) 21 58385308 - 58385210 camachina@camagroup.com

CAMA FRANCE

CAMA 2 S.a.r.I. 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











