CASE STUDY

Ultra-automated packaging line boosts productivity and turnover at Cabrioni





Cama Group helps Cabrioni meet demanding production goals thanks to the deployment of advanced packaging solutions. Fast changeover, higher throughput and positive delicate handling combine to complement high-quality products

Founded in 1973, Cabrioni Biscotti srl – a renowned Italian cookie brand – pursues a manufacturing philosophy based on advanced production and product excellence.

Based in Emilia Romagna, the company sources and uses ingredients of the highest possible quality, including eggs, cream butter, Italian flour, malt and honey. No artificial flavours, colours and preservatives or dehydrated products are used in its products.

This use of high-quality ingredients – which constitute a significant proportion of the cost of production – means that the company has to make steps to remain competitive and, as such, has developed a strategy based around investment in the best possible manufacturing practices and equipment.

"We believe that these investments are the best way to ensure the development of the company," explains Stefano Cabrioni, President of Cabrioni. "Over the years we have invested heavily in infrastructure and automation, selecting highly qualified suppliers with whom we have established strategic partnerships. This approach has allowed us to obtain a positive return of investment, both economic and qualitative, in a relatively short time."

Angelo Cabrioni, the company's founder, adds to this: "At the production level, our philosophy is to invest in quality high-tech machinery to optimize the packaging process and minimize waste and machine downtime for repairs."

Over the last 20+ years, the company has gradually expanded its spaceoptimised production area, which today extends over an area of 15,000 m². This expansion has gone hand in hand with major investments in the automation of manufacturing lines, including on two lines dedicated to the production of wafers, where Cabrioni has replaced manual packaging processes, which could only handle 50% of the oven's production, with a new fully robotised Cama packaging line.



Breakthrough packaging

The new packaging line, engineered and installed in 2018 by Cama, comprises an IF318 Monoblock fully robotised two-axis loading system with integrated box forming/loading/closing units, and an FW748 wraparound case packer. The robotic monoblock system and the wrap-around case packer are part of the Break-Through Generation (BTG) range from Cama, which incorporates the latest technological innovations. These include higher sanitary standards; open profiles; improved integrated cable system routing; flexible and compact configuration; enhanced ergonomics; user-friendly controls; energy-saving engineering; and easy format-change thanks to RFID technology.

In the loading unit, format changeover is achieved by initiating a recipe change in the HMI, followed by the replacement of some mechanical parts, which are determined by the blank sizes. In the wraparound machine, changeover is performed exclusively by interactions with the HMI.

Quality at all stages

The line is capable of packaging 330 cartons per minute, with 22 per wraparound case. In operation, flow-wrapped wafers are packed by vacuum-cupequipped robots, into boxes that have been formed from blanks in a parallel module. These boxes are then glued and closed before being conveyed to the case packer, where they are loaded into preformed wraparound shipping or shelf-ready cases. These display cases are then closed and sent to a palletiser. The machine is also equipped with a special photocell device for quality control, identifying issues such as non-glued flaps, where cases can be rejected onto a free roller conveyor at the machine's outfeed.



The electrical cabinets have been integrated in the machine structure to gain space, while the "easy entry" solution guarantees safe and ease access for maintenance and cleaning. The magazine has been positioned at 800 mm height for improved operator ergonomics.

Cabrioni already owned three Cama packaging lines; and the renewed confidence in the Italian machine builder was backed up by the new line's short return on Investment coupled to increased production efficiency and significant labour savings. "We appreciated the solution proposed by Cama for the simplicity of the process and the reliability of the system that guarantees an efficiency rate over 95%," Angelo Cabrioni explains.

Continuous investment

The company has also invested in its logistics structure, which includes a fully automated warehouse managed by Automated Guided Vehicles (AGV), which collect the pallets at the end of the line and place them on the special vertical racks in a pre-established order, before loading onto trucks.

Thanks to this continual investment in modern infrastructure, Cabrioni has a turnover that has increased at a rate of 5% per year since 2012. The company is also aiming to increase both domestic and export sales volume, especially in areas where it is less established. This will be achieved with the expansion of its product range, from prepared



cakes through to ready-to-cook ingredients. A new 3,000 m² factory expansion, adjacent to the main plant, will also be ready by the end of the year.

Cama Group, since 1981, is an international leader in engineering and production of high-technology secondary packaging systems. We offer completely integrated packaging lines, from primary packages up to final packaging, ready for palletizing, serving the Food (Bakery, Confectionery, Coffee, Ice Cream, Dairy, Ready Meals, Grocery), Non Food (Personal, Health & Home Care) and Pet Food industries. Via Como 9 – 23846 Garbagnate Monaastero – LC - T. +39 031 879811 commerciale@camagroup.com - www.camagroup.com

