DAIRY PRODUCTS

PRODUCT CATALOG

CHAPECÓ®
Soluções Industriais

God is Faithful!


PERFORMANCE-DRIVEN
TECHNOLOGY
ORDEM E PROGRESSO
BRAZILIAN
TECHNOLOGY


SOLUTIONS
FOR THE
Cheese
Processing
Industry

SUMÁRIO


CSI AL 3000
CSI FCA 3000
CSI FCA 3000


CHEESE MOLDER
CSI FBR 3000
CSI FBR 3000
CHEESE MOLDER

THE COMPANY

At Chapecó Soluções Industriais, we specialize in the manufacture of high-tech equipment for the dairy industry. We began operations in 2009 in the municipality of Chapecó, Santa Catarina, and since then, we have consolidated our presence in the metal-mechanical segment with a portfolio of reliable products, approved and recommended by our clients.

We manufacture high-performance equipment through a meticulous process that encompasses product engineering, selection of high-quality raw materials, precision laser cutting and welding, and an attentive finish with a functional and innovative design.

With the goal of preserving the well-being of professionals who use our products, we produce machines and equipment that meet the requirements of the current Regulatory Standard 12 (NR12).

Projects and equipment are developed by a team of engineers and industrial designers, who provide a safety report, Technical Responsibility Annotation (ART), and a manual for each piece of equipment detailing the care and procedures necessary to ensure optimal performance and durability.

COMPLETE EQUIPMENT LINE FOR THE DAIRY INDUSTRY

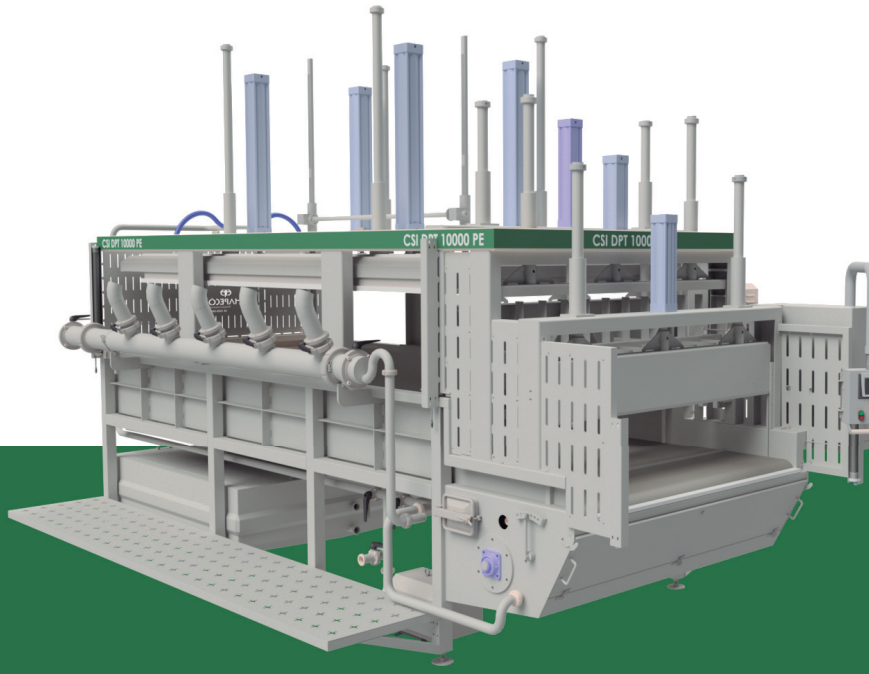
DOUBLE O CHEESE VAT

This equipment is designed for the coagulation, cutting, and cooking of the cheese curd mass. It is equipped with an HMI screen control panel, allowing the creation of work recipes with customizable timing and curd agitation and cutting speeds. Available in capacities from 3,000 to 15,000 liters.

CURD DRAINING AND PRESSING TUNNEL

The full-pressure draining press receives curd from the Cheese Vats (Queijomatics). With well-distributed piping, it creates a uniform curd bed, ensuring even and efficient whey drainage.

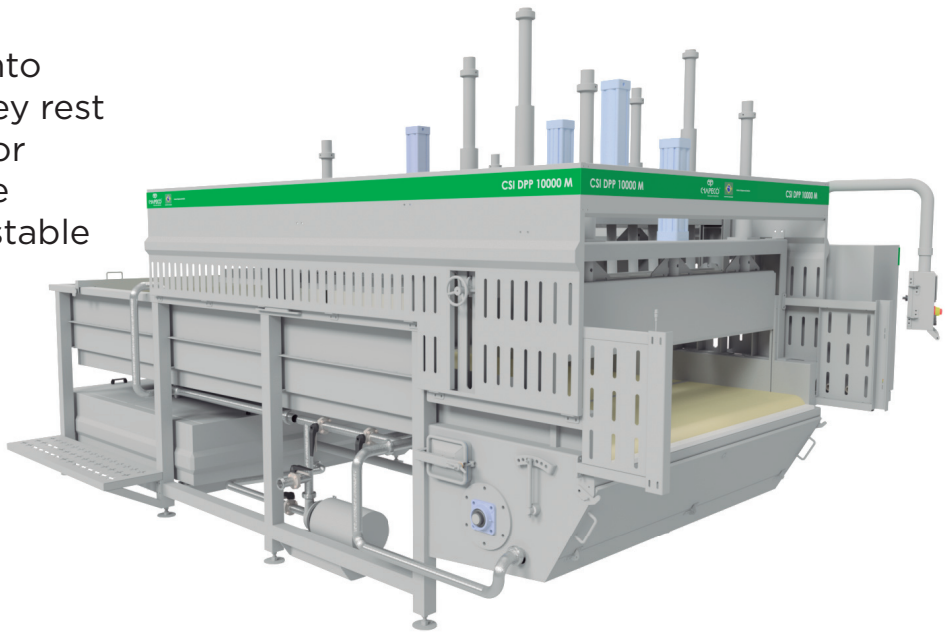
The pressing system is consistent and avoids deformation or mechanical defects in the curd bed. The cutting mechanism is suitable for all cheese types. All functions are controlled via PLC, and the CIP system is fully automated.



CURD DRAINING AND PRE-PRESSING TUNNEL

Designed for use in mozzarella cheese production, this equipment separates whey from curd. Its pressing mechanism removes excess whey, and its automatic discharge system allows the production of blocks in various sizes.

The blocks are discharged into acidification carts, where they rest until reaching the ideal pH for stretching. All operations are controlled via PLC and adjustable through the HMI interface.



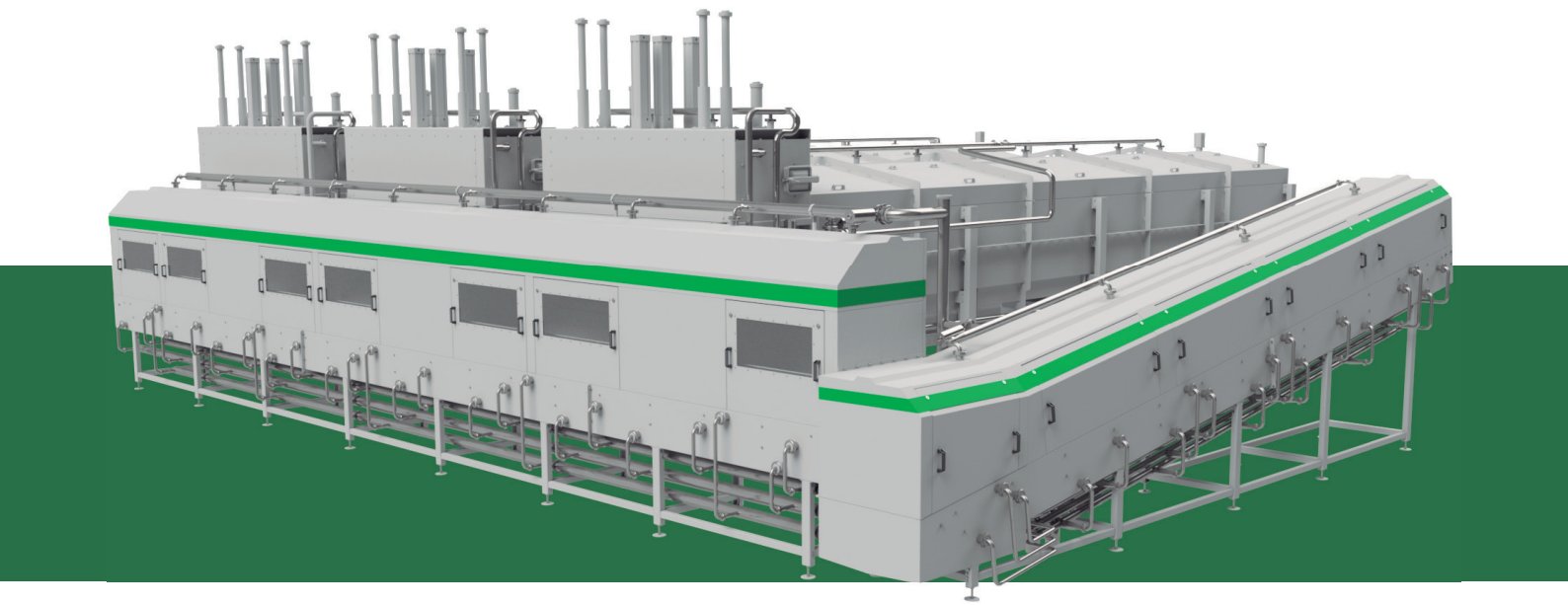
CONTINUOUS DRAINING AND FERMENTATION TANK FOR MOZZARELLA CURD

The continuous draining and fermentation system for mozzarella consists of three main stages: draining and fermentation tanks, the discharge conveyor, and the feeding conveyor. Curd prepared and stored in the cheese vats (Queijomatics) is directed via piping to the fermentation tank, which evenly distributes the curd across all draining zones.

After whey drainage, the curd rests for fermentation, with resting time depending on the acidity required. Direct steam injection can be used to speed up fermentation. Once the curd reaches the target pH, it is fractioned and discharged.

The discharge conveyor sends the blocks to the feeding conveyor, which delivers them to the cheese stretcher.

A key feature is its fully enclosed, contamination-free cycle—there is no operator handling. Both the tanks and conveyors are sealed with inspection-only access. Each tank can process a full cheese vat batch, draining all whey without interruption and achieving uniform grain texture. The CIP cleaning system is automated.



STATIC FINES FILTER

This equipment is primarily designed for the recovery of fine solids from whey. It is also suitable for filtering butter whey and cleaning solutions. Flow rates are sized according to specific applications. The system includes a fully integrated automatic CIP (Clean-in-Place) system.

MOZZARELLA CURD FEEDING SYSTEM FOR CONTINUOUS STRETCHING

This equipment was developed to reduce manual labor and eliminate curd waste during the feeding process of the mozzarella stretcher. By automating this step, human contact with the curd is eliminated, thereby minimizing the risk of cross-contamination. The unit features a level sensor that triggers both an alert on the HMI (Human-Machine Interface) and a warning light when low curd levels are detected.

It is also equipped with a buffer tank to collect acid whey drained from curd transport trolleys. The tank includes a level sensor that activates a motorized pump to transfer the whey. Its internal surface is coated with Teflon, and the entire system includes an automatic CIP cleaning cycle.


Behind
this
smile
is a product
you can
trust.

CONTINUOUS WATE STRETCHING MACHINE - 4,000 KG/H

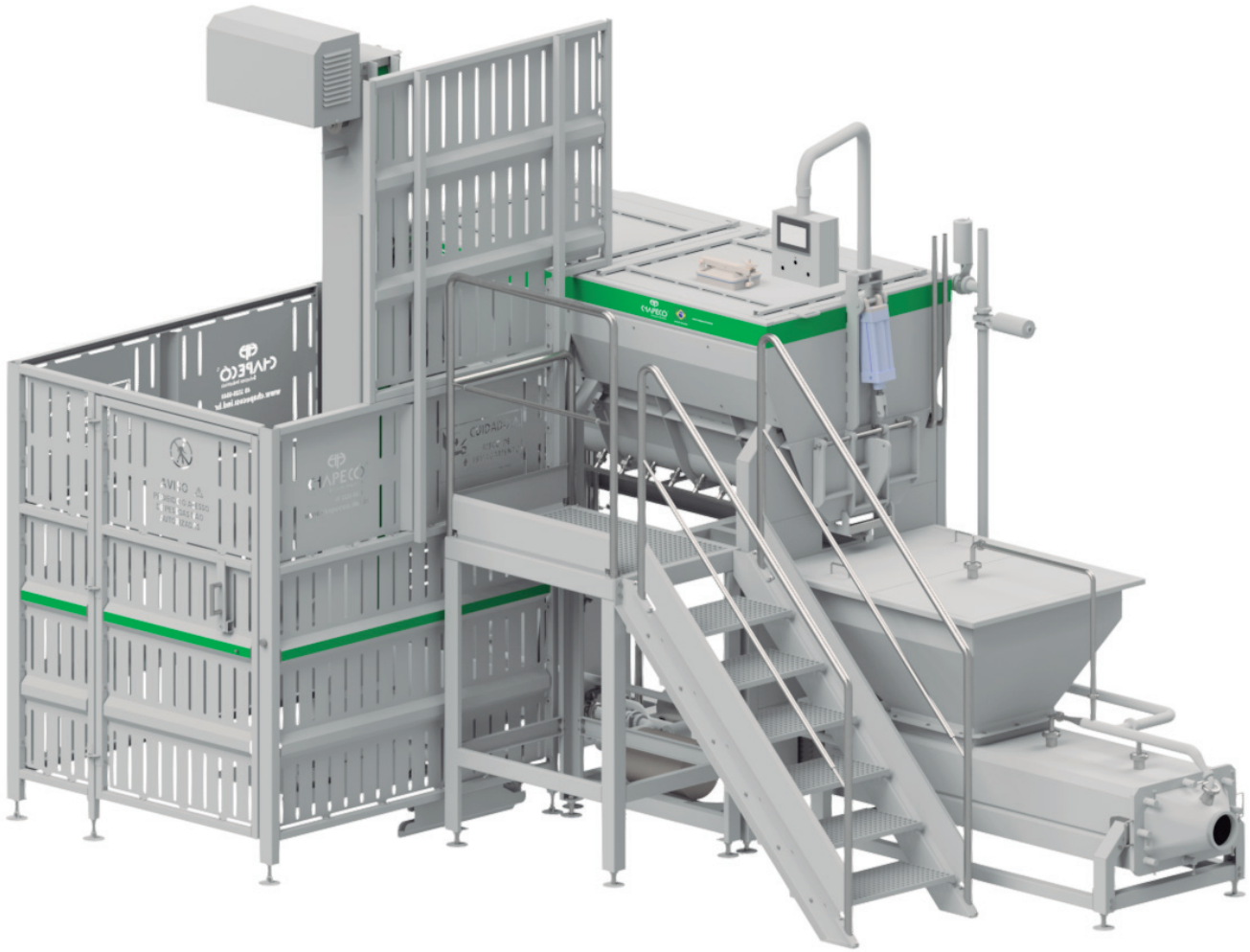
As part of our commitment to delivering advanced and innovative solutions to the Brazilian dairy industry, we are proud to launch our high-capacity continuous hot water cheese stretcher. Until now, our models have handled up to 2 tons per hour, but we are now offering machines with an effective capacity of up to 4 tons per hour — that's right, your facility can process up to 40,000 liters per hour with just one unit.

BATCH STEAM CHEESE STRETCHER

The batch steam stretcher is specifically designed to cook, knead, melt, and stretch dairy-based and food-grade masses such as shredded mozzarella, processed cheese blends, and large-scale food preparations. With a rugged and heavy-duty design, it is ideally suited for cheese plants and industrial production environments.

Equipped with two independent, counter-rotating augers, the unit can process a wide range of curds, including fresh curd, frozen industrial curd, and plant- based alternatives. The combination of mechanical kneading and direct steam injection heating offers significant advantages in the cheese production process, enhancing both product quality and yield.

In addition, the steam stretcher is paired with a molding buffer hopper that matches the machine's capacity. This system features thermal insulation, a hotwater-jacketed body, and helical conveyors to guide the processed product directly into a molding unit. This equipment combination provides a complete solution for the production of cheese and other food masses on an industrial scale.



AUTOMATIC MONOBLOCK STRETCHING MACHINE

This equipment is designed for processing pasta filata cheese curd that has reached the optimal pH for stretching — the point at which the curd is ready to enter the next stage of cheese production. With a production capacity of up to 3,000 kg/h, it is suitable for high-throughput operations and large-scale cheese manufacturing.

The unit features a fully integrated automatic CIP (Clean-in-Place) system, simplifying sanitation procedures and ensuring proper cleaning between production cycles. It is also equipped with an in-line curd cutter, allowing for efficient and continuous integration of curd cutting prior to stretching.

All production parameters — including speed, temperature, and other process variables — are fully adjustable through the machine's HMI (Human-Machine Interface). This allows operators to fine-tune settings according to specific production needs, ensuring a consistent and controlled manufacturing process.

QUALITY PRODUCTS
ARE MADE WITH
HIGH-PERFORMANCE
EQUIPMENT.

CHEESE BLOCK FORMER WITH COOLING UNIT

The CSI Molder Cheese automatic block forming and cooling machine is suitable for all types of pasta filata cheeses and is particularly recommended for the production of Mozzarella and Provolone. This technology allows for the automatic portioning of pasta filata cheese into cylindrical, square, or rectangular blocks without the use of external molds or any manual handling by operators.

This system enables a fully automated molding process, eliminating operator intervention during the shaping stage and, consequently, minimizing the risk of product contamination from manual contact.

Production capacity is tailored to each facility's specific requirements, with throughput reaching up to 3,500 kg/h (7,700 lbs/h). A key feature of this equipment is the ability to form and discharge cheese blocks outside of chilled water, which results in more uniform shapes and improved cooling efficiency. Asa result, the cheese blocks can be transferred directly to the brining channel (brine flume system) without the need for an additional pre-cooling tank.

TWO-STAGE CHEESE BLOCK FORMING AND COOLING SYSTEM

This equipment was developed to introduce innovation in the molding and cooling process of pasta filata cheese blocks. Its function within a cheese plant is to form square, rectangular, or round cheese blocks, ensuring well-defined edges and achieving internal temperatures below 35°C (95°F) at the center of the block and 18°C (64°F) at the surface.

To achieve these targets, the equipment is designed to perform block molding and discharge within a heated upper chamber. When steam is injected, it facilitates the shaping of the pasta filata cheese within the mold, preventing the mass from sticking to the mold walls. As a result, the cheese obtains smooth, uniform surfaces and well-formed upper, lower, and side faces. Furthermore, when the block is discharged after cooling, the residual heat helps release it from the mold effortlessly, without compromising its final shape.

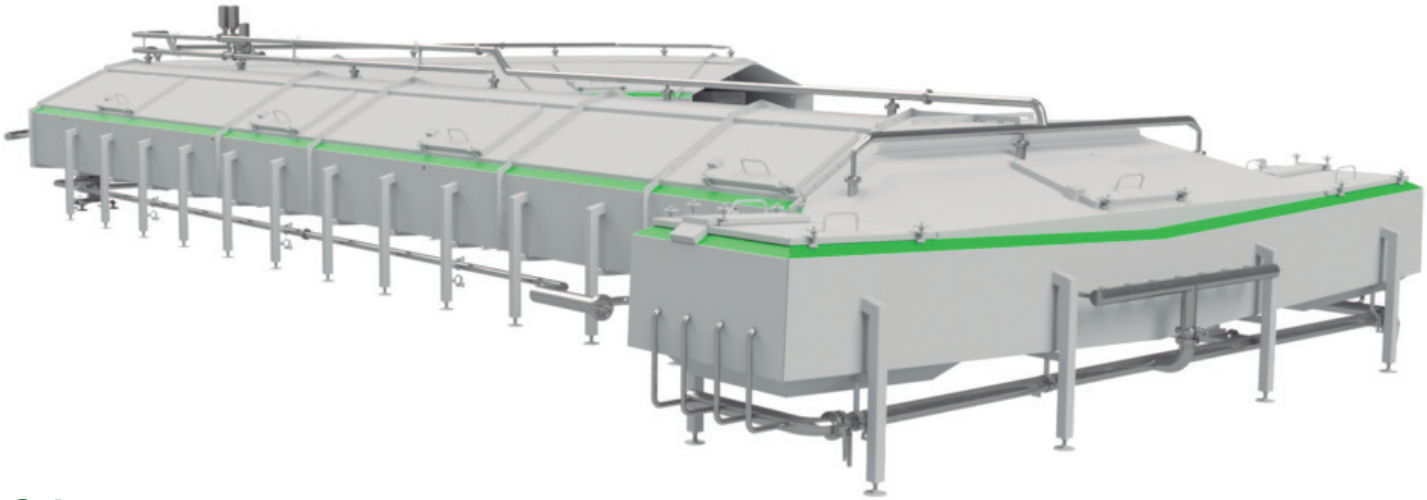
Unlike other equipment that struggles to achieve the desired temperature distribution, extensive R&D led to the development of a two-stage cooling process. In the first stage, the blocks are submerged in water at a higher temperature, followed by a second stage with cooler water. This method significantly improves cooling efficiency. Studies have shown that when cheese blocks are immediately submerged in very cold water, the outer layer cools rapidly and forms a thermal barrier that prevents heat from dissipating efficiently from the core. However, by first submerging the block in warmer water and subsequently transferring it to colder water, the cheese reaches the target internal temperature more quickly and uniformly.

PRE-BRINING FLUME SYSTEM

The pre-brining flume system is directly connected to the cheese block forming and cooling unit, enabling the seamless discharge of molded cheese blocks. It is custom-sized according to each client's production requirements. Constructed entirely from 316-grade stainless steel, the system features controlled flow channels that guide the cheese pieces toward the transfer conveyor, which in turn transports them to the main brining flume.

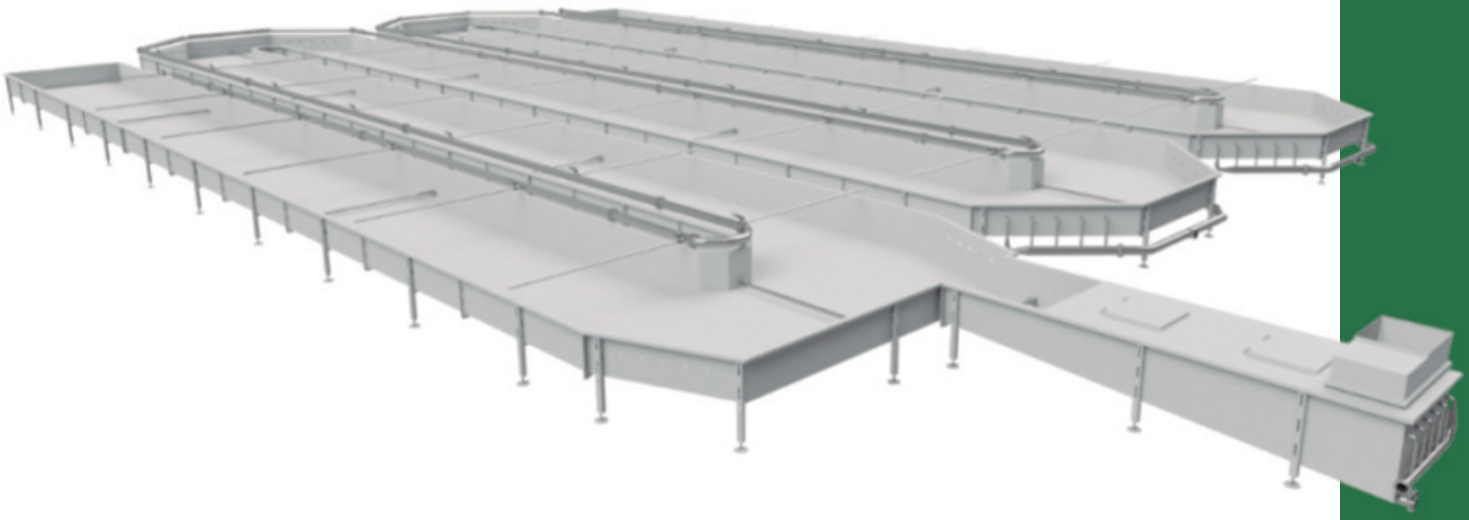
ENCLOSED BRINING FLUME SYSTEM

In this system, the product is placed inside a closed brine tank filled with chilled water and salt solution. The cheese blocks are transported throughout the tank by high-pressure water jets, powered by specialized pump motors that ensure consistent movement along the entire pathway. CIP system integrated into the equipment.



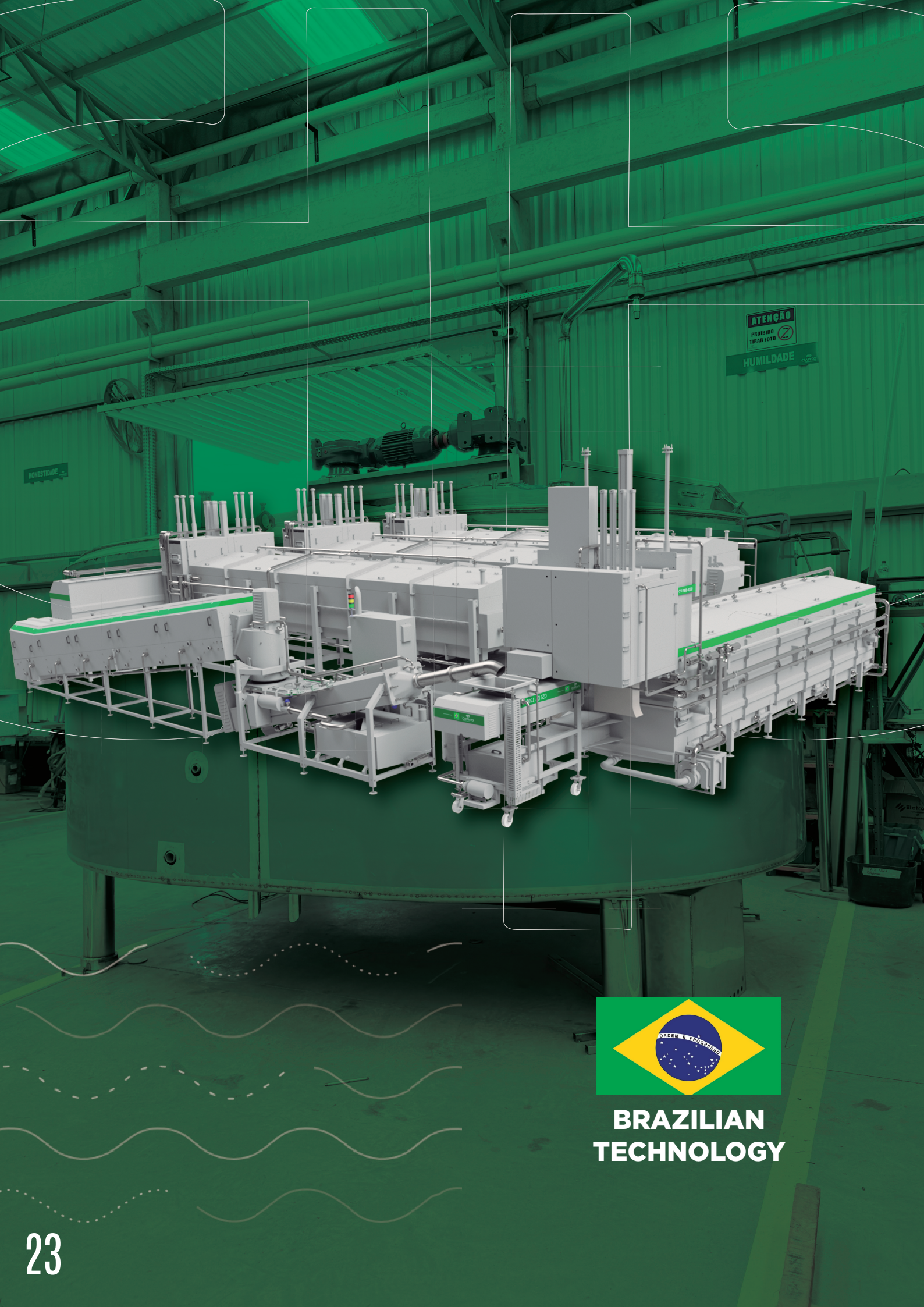
OPEN BRINING FLUME SYSTEM

In this configuration, the product is placed inside an open brine tank filled with chilled water and salt solution. The cheese blocks are moved along the entire length of the tank by high-pressure water jets, generated by specialized pump motors. CIP (Clean-in-Place) system integrated into the equipment.



STACKED BRINING FLUME SYSTEM

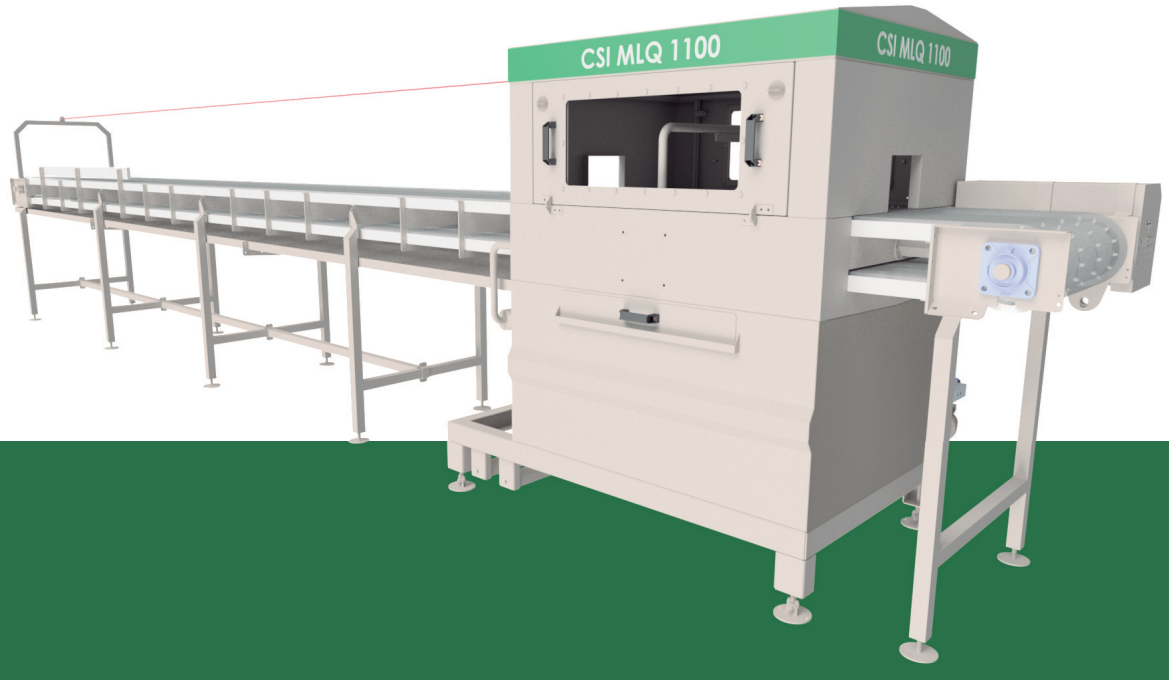
In this system, the product is placed inside a stacked brine tank filled with chilled water and salt solution. The cheese blocks are transported throughout the tank by means of high-pressure water jets, powered by specialized pump motors that maintain a continuous flow along the brining path. CIP (Clean-in-Place) system integrated into the equipment.



BRAZILIAN TECHNOLOGY

ALIGNING CONVEYOR BELT

The aligning conveyor belt is designed to connect the brining flume system to the cheese bar cutter. Its function is to align and orient the cheese blocks properly for accurate entry into the cutting unit. As an optional feature, the conveyor can be equipped with an integrated washing module, which removes excess salt and surface residues from the cheese blocks as they exit the brining system.



AUTOMATIC CHEESE BAR CUTTER

This equipment is specifically designed for cutting chilled cheese bars. With adjustable cutting settings, it can divide cheese pieces of up to 850 mm (33.5 inches) in length into two or three equal sections.

Its production capacity can reach up to 8,000 kg/h (17,600 lbs/h).

AUTOMATIC BELT VACUUM CHAMBER MACHINE

Designed for high-volume packaging of large product batches, this machine offers a production capacity of up to 3 cycles per minute. It is equipped with a vacuum pump and a Roots-type vacuum booster.

The unit features sealing bars on both sides, and the construction material eliminates the need for water cooling on the sealing elements. The vacuum chamber height is fully adjustable via operator control. This is a robust, low-maintenance machine, fully compliant with NR12 safety standards.

Machine equipped with HMI: In addition to standard operational controls, the screen enables the generation of performance reports and provides notifications related to preventive maintenance of the equipment.

CHEESE DRYING TUNNEL

This machine is designed to reduce surface moisture on cheese blocks immediately before entering the packaging area. Equipped with air compressors and directional nozzles, it generates forced air jets that target all surfaces of the cheese for effective drying. The system also includes a tank for storing and dispensing anti-mold agents (natamycin).
Automatic CIP (Clean-in-Place) system integrated into the equipment.

HOT WATER SHRINK TANK

This equipment is designed for the submersion of vacuum-packed products in heat-shrinkable bags, enabling precise shrinking through controlled thermal immersion. It is equipped with an HMI for operation control and adjustments, allowing visualization of production data and performance graphs.

The system features automatic temperature and water level control, supporting a production rate of up to 4 cycles per minute. Automatic CIP (Clean-in-Place) system integrated into the equipment.

CUTTER MIXER FOR SPREADABLE AND PROCESSED CHEESES

Equipped with a direct heating system, this machine is ideal for the production of cream cheese spreads, processed cheeses, ricotta cream, Minas Frescal, traditional cream cheese, and related dairy products.
It performs multiple operations in a single unit, including: grinding, mixing, blending, thermalization, melting, pasteurization, sterilization and emulsification.

PROVOLONE SMOKING SYSTEM

This smoking system is designed specifically for Provolone cheese pieces ranging from 400 g to 4 kg (0.88 to 8.8 lbs). It features an integrated smoke generator and includes trolleys for transporting cheese blocks throughout the smoking chamber. The operation is PLC-controlled, with all settings managed through HMI, allowing operators to perform tasks with greater efficiency and speed. Equipped with a built-in exhaust system, the smoke is effectively extracted and vented outside the processing area, ensuring that the operating environment remains safe.

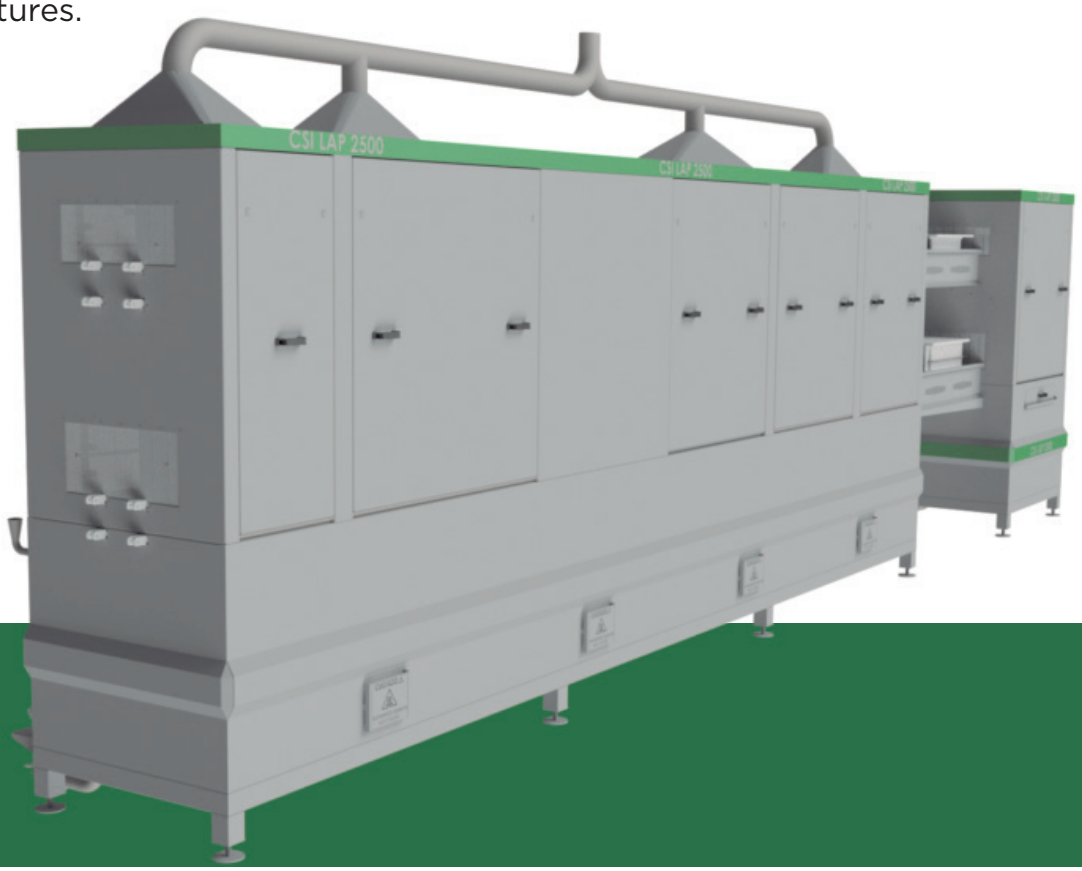
CIP SYSTEM

The Smart Cleaning-in-Place (CIP) system is a hygienic cleaning solution that saves time, reduces environmental impact, and lowers operating costs—without compromising food safety or product quality. The smart CIP system performs continuous operational adjustments, utilizing optimized volumes of water and detergent, precisely calibrated to meet the cleaning requirements of each cycle.

It enables water consumption reductions of up to 21% and detergent savings of up to 7%, contributing to both sustainability efforts and cost-efficiency across the cleaning process.

MICRO-PERFORATED CHEESE MOLD WASHER

This equipment is designed specifically for the cleaning of micro-perforated molds and lids. The system operates in three stages, consisting of a pre-wash zone, a main wash zone with either alkaline or neutral chemical detergent, and a final rinse. It is suitable for both individual and perforated molds, and features an extensive water distribution network with removable sprinkler nozzles to ensure thorough and uniform cleaning across all surfaces. The machine is equipped with a PLC-controlled system and HMI, allowing full adjustment of wash times and temperatures.



PLASTIC CRATE WASHER

Cleaning of plastic crates.
It has three stages, which consist of a pre-wash area, washing with chemical or neutral detergent, and an extra rinse, for individual molds. It contains a wide water distribution system with removable sprinkler nozzles, ensuring cleaning.
Control system via HMI and PLC, with adjustable time and temperature.

FERMENTATION RACK WASHER

The cleaning system for fermentation racks complements operations in industrial sectors, providing safe and fast cleaning, avoiding manual handling, and reducing water, detergent, and labor consumption.

CHEESE MOLD WASHER

Equipment developed for washing plastic molds. It has three stages, consisting of a pre-wash area, washing with chemical or neutral detergent, and a final rinse. For individual molds, it includes a wide water distribution system with removable sprinkler nozzles, ensuring effective cleaning.
Control system via HMI and PLC, with adjustable times and temperatures.

CONVEYOR SYSTEMS

Equipment developed for the transport of various products, manufactured according to the specific needs of each application.

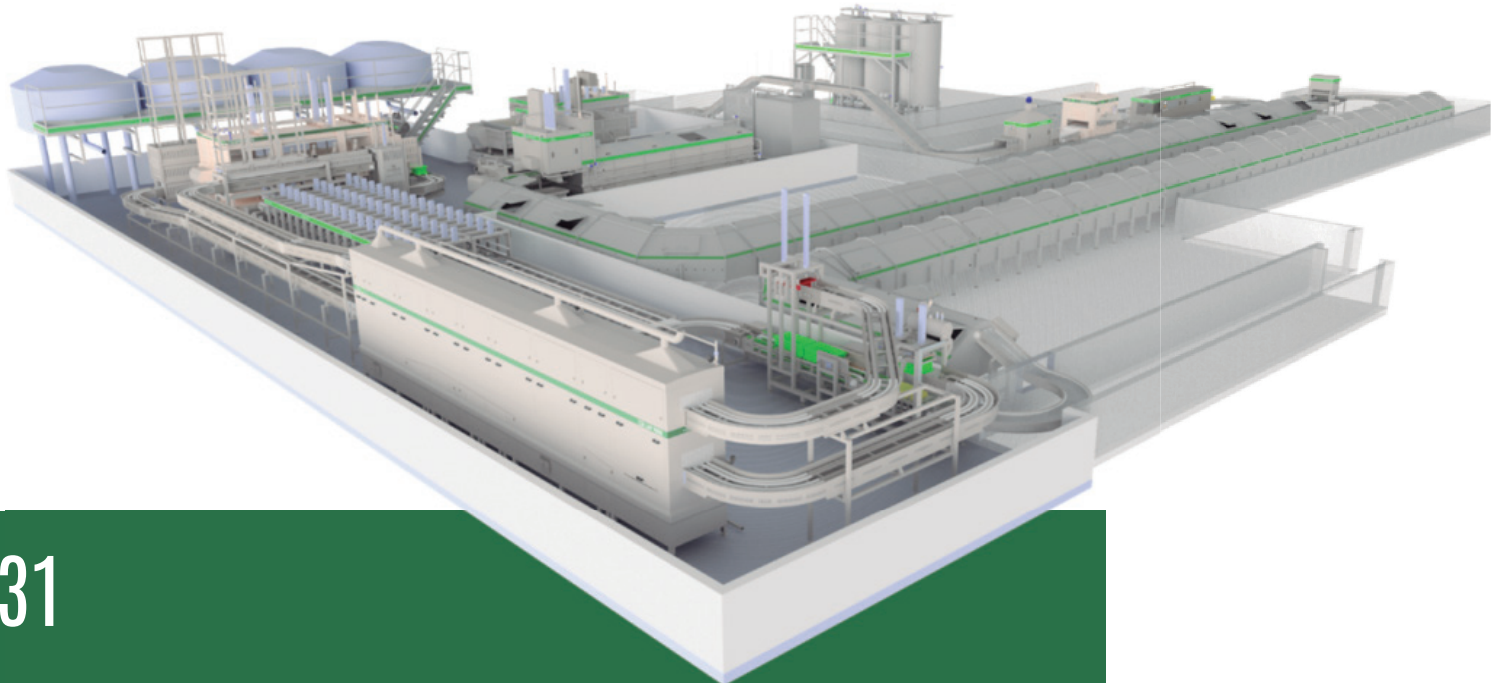
AUTOMATED PROCESSING LINE FOR HARD AND SEMI-HARD CHEESES

Once the curd mass is deposited into the forming molds, the system automatically carries out the entire process: the lid is automatically positioned onto the mold, and the mold proceeds to the pressing system.

The pressing equipment operates continuously, with no need to fully load the machine before starting the process. After pressing, the molds are sent to the Cheese Demolding and Cutting System, which removes the lid and then the cheese.

Once the curd is removed, it is redirected to the cutting system, while the molds and lids are sent to the cleaning machine.

The cheese mass is cut according to the mold dimensions specified and is transferred to the salting section. The molds and lids are then sent to the washer, where the cleaning process is carried out.

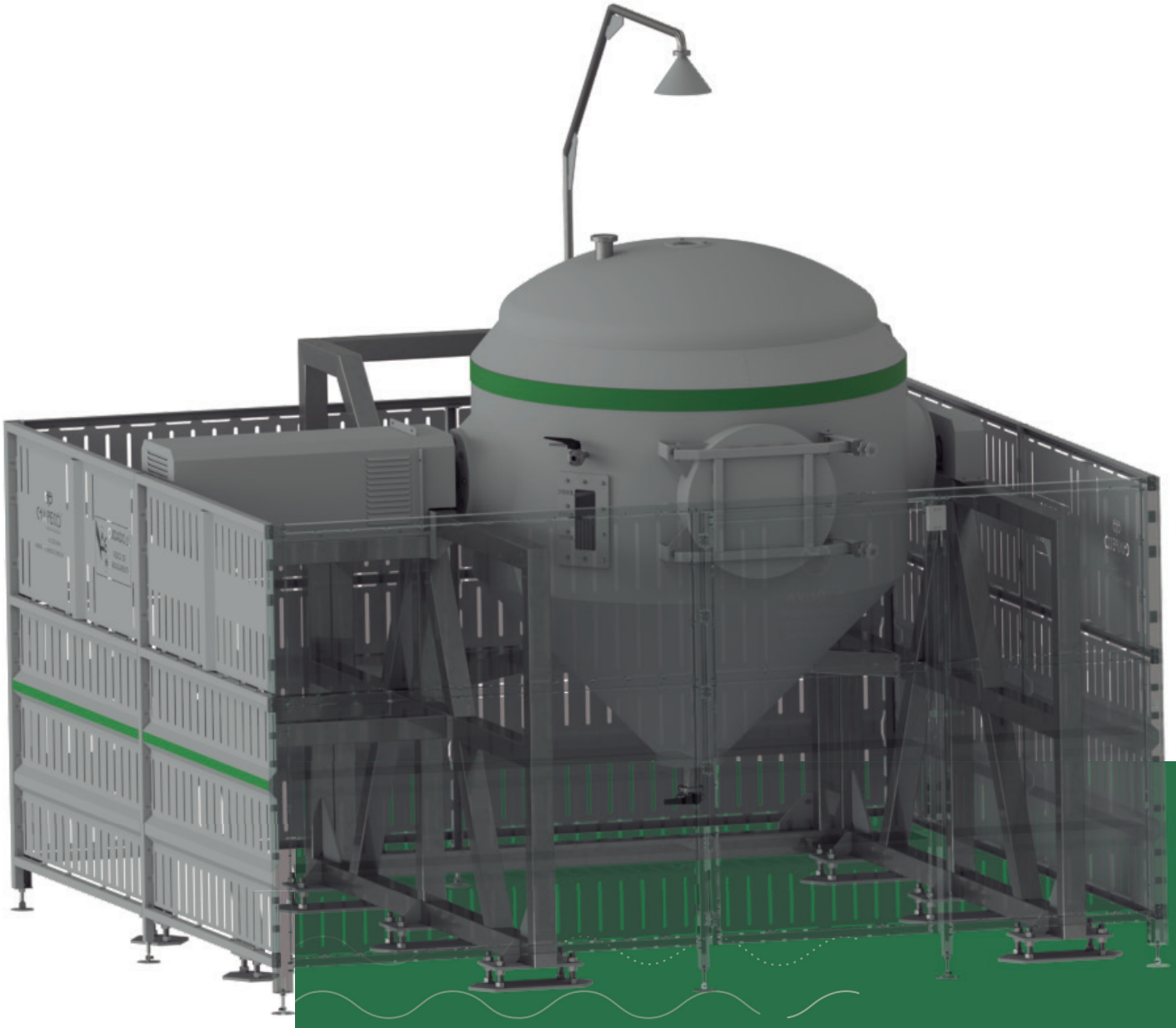


BUTTER CHURNER

Equipment developed for the production of butter through an efficient and dynamic process. The fat globules are combined to form butter grains, facilitating the separation of fat from buttermilk by a mechanical process operating in both directions. At the end of the cycle, the butter appears in granular form, and the buttermilk is removed through a draining process.

Butter washing can be performed in the same machine.

Fully built in 304 stainless steel, it features adjustable speed through a frequency inverter, with a capacity of 500 to 2000 liters. Fully compliant with safety regulations.

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