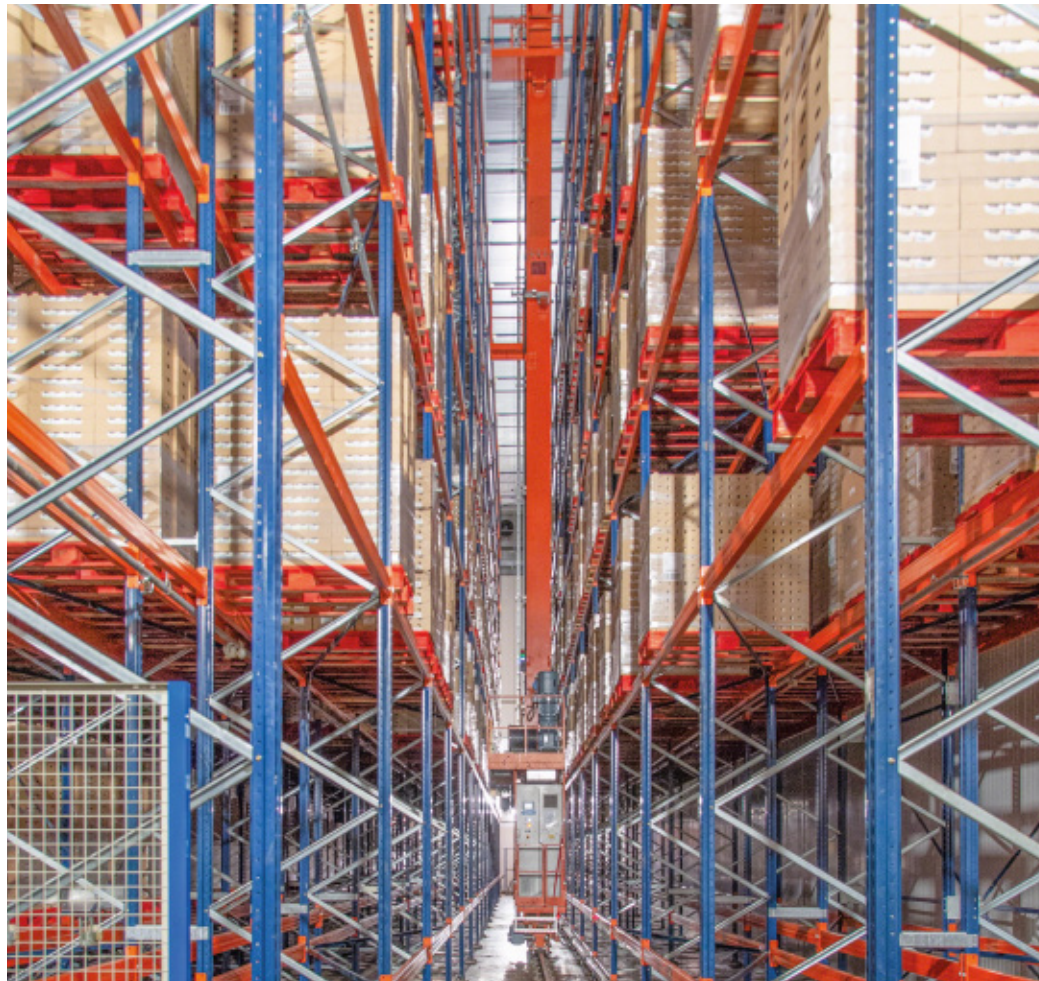


Logistics operations support the annual production of 30,000 tonnes of desserts

The dairy company Laiterie Saint-Père, of the Les Mousquetaires group, controls the traceability of its finished goods with a warehouse automatically connected to production.

Country: **France** |
Sector: **Food & beverage**



CHALLENGES

- **Automate** the storage of finished goods at a refrigerated temperature.
- **Automatically connect** production line outputs with the storage area.
- Control the **traceability** of desserts in real time.

SOLUTIONS

- **Automated pallet warehouse.**
- **Automated pallet conveyors and elevators.**
- **Easy WMS warehouse management software.**

BENEFITS

- Capacity to store around **2,500 pallets** at a constant temperature of **2 °C**.
- Automated storage and shipment of approximately **700 pallets a day** containing finished goods.
- Complete traceability of **2,500 pallets** with desserts such as custards, mousses and rice pudding.

Founded in 1905 in Saint-Père-en-Retz (France), Laiterie Saint-Père is an organisation that specialises in producing and distributing dairy products. Its wide array of goods includes milk, butter, café liégeois, crème fraîche, mousse and rice pudding. All of its SKUs are sold in Intermarché supermarkets and numerous restaurants across France.

» **Founded: 1905**

» **No. of employees: 360**

» **Dessert production lines: 6**

» **No. of SKUs: 243**

The logistics operations of food companies such as Laiterie Saint-Père are centred around storing perishable products. Due to their attributes and composition, these goods must be managed in line with strict quality, traceability and safety standards.

“We manufacture safe, high-quality products that meet our clients’ needs and contribute to the sustainable development of our business and the dairy sector. The milk we use comes from French farms located less than 100 km from the production centre. This proximity enables us to maintain the cold chain and provide effective traceability,” says Arnaud Breton, Head of Automation and New Construction at Laiterie Saint-Père.

The town of Saint-Père-en-Retz, in western France, is home to the dairy company’s modern logistics facilities and six production lines equipped with state-of-the-art automated systems. The organisation turned to cutting-edge technology to sustain the yearly production of 30,000 tonnes of desserts (e.g., custards, mousses and rice pudding), thus optimising its supply chain.

With regard to logistics, the business invested in automation to address its continuously increasing production volume. “We used to manage our merchandise in a static system where workers handled pallets using a service lift,” says Breton. Now, the dairy company has a fully automated facility for finished goods, connected to the production lines.

Laiterie Saint-Père has also implemented Mecalux’s Easy WMS warehouse management system. This software will oversee all

operations and ensure real-time stock traceability. “By managing our logistics operations digitally, we can deliver the products our clients order efficiently and promptly,” says Breton.

One of Laiterie Saint-Père’s priorities is to guarantee that the desserts that leave production are stored at a refrigerated temperature. Breaking the cold chain could lead to serious problems, such as the premature deterioration of the goods, the loss of their

properties and the growth of bacteria and microorganisms. To maintain a constant temperature of 2 °C, Mecalux built the automated warehouse with sandwich panels, outfitting it with equipment to ensure correct refrigeration (compressors, condensers, expansion valves and evaporators).

Automated logistics operations linked with production

“Warehouse automation has considerably increased our productivity and reduced the



risk of accidents and mistakes associated with manual material handling,” says Breton. Laiterie Saint-Père’s automated facility is a clad-rack warehouse. To facilitate the inflow and outflow of desserts, Mecalux strategically set it up near both the production lines and the docks.

With a height of 17 m and two aisles spanning 52.5 m long, the automated clad-rack warehouse can hold 2,500 pallets containing finished goods. A stacker crane operates in each aisle. Following instructions from Easy WMS, these machines store, retrieve and transport around 700 pallets a day autonomously. The racking installed is double-deep, meaning it can accommodate two pallets deep per level, doubling capacity. To access the second pallet, the stacker cranes are equipped with telescopic forks capable of handling two unit loads simultaneously. Easy WMS is configured so that both positions house pallets of the same SKU, avoiding unnecessary movements.

Pallets arrive at the storage area from production through automated internal transport systems. In the warehouse, the stacker cranes pick up the products and place them in the corresponding location. “The automatic pallet elevators and conveyors have increased our speed and load capacity in internal product transport,” says Breton.

Real-time traceability

Laiterie Saint-Père needs to monitor all its goods in real time to prevent mistakes and ensure total traceability of its SKUs.

To track inventory 24/7, the pallet checkpoint, installed at the start of the conveyor system, automatically reads the barcode label on each pallet. This procedure verifies that the goods match those scheduled to arrive according to Laiterie Saint-Père’s ERP system. The dimensions and condition of the pallets are also checked to ensure they meet the requirements for storage.



“We chose Mecalux as our automated pallet storage and transport systems provider because it’s an industry leader in these types of solutions.”

Arnaud Breton
Head of Automation and New Construction,
Laiterie Saint-Père

It was critical for Easy WMS to be integrated with Laiterie Saint-Père’s ERP software; now, the two systems can exchange data on the warehouse’s status and business needs. These include items scheduled to arrive and orders placed by customers that have to be shipped as soon as possible.

To assign each pallet a racking location, Easy WMS makes a series of calculations taking into account the number of empty slots, the SKU and the demand level. This is where automation comes into play: the pallets are moved to their assigned locations automatically by conveyors and a stacker crane.

For pallet shipments, the ERP system notifies Easy WMS 12 to 24 hours in advance of the products scheduled for distribution. This makes it possible to prepare outbound orders beforehand, saving time. The warehouse features a spacious, comprehensive shipping area. Here, Mecalux installed a transfer car. Following Easy WMS’s instructions, it sorts pallets into live preload storage channels based on whether they belong to the same order or transport route.

These live channels are slightly inclined, enabling pallets to slide by gravity from the highest point to the lowest, which leads to the docks. Optimally organising the shipping area has made the distribution of desserts faster and more efficient.

Logistics 4.0 made sweeter

To produce 30,000 tonnes of desserts a year, logistics and production must work hand in hand. Thanks to its clear commitment to new technologies, Laiterie Saint-Père has a flexible supply chain ready to take on any challenges that arise.

The automated storage and internal transport systems, coordinated by Easy WMS, avoid material handling errors. Moreover, they ensure full traceability of 2,500 pallets containing dairy products and shorten response times. As a result, Laiterie Saint-Père can successfully meet customer requirements.