



The Company

Formed in 1906 with the establishment of the first brewery in La Coruna known as “La Estrella de Galicia”, Hijos de Rivera S.A.U. branched out into other sectors over the years to follow, including mineral water, wine, liqueurs and cider, gradually becoming a global business corporation specializing not only in manufacturing, but also food distribution.

As a result of the continuous growth that has always characterized Hijos de Rivera, thanks in part to the intensive use of state-of-the-art technology, during the last years new technological investments have been made in the areas of production and logistics at the historic Estrella Galicia factory in the A Grela industrial district of La Coruna.

Problems and Objectives

The considerable expansion of the production area in the Estrella Galicia factory (installation of new cooking machinery and new filling lines for non-returnable cans and bottles) and existing planning restrictions (the facility is located within the urban fabric of the city of La Coruna) have presented Hijos de Rivera S.A.U. with a significant logistical challenge: to manage the marked increase in stock to be stored and volumes to be handled using existing areas only, while trying to improve customer service and the efficiency of warehouse operations, without affecting production.

The solution and the results achieved

Using the System Logistics FRS (Fast Rotation Storage) solution, which features a system of multi-level linear shuttles equipped with a "DIGISAT" pallet handling system with satellite technology that can handle products within multi-depth shelving, it was possible to implement an entirely automated storage system, making use of the area within an existing warehouse and raising the roof by 27 metres in height.

This system can accommodate up to 11,000 Euro-pallets (or alternatively, and with total flexibility, up to 8,900 industrial-type pallets) over a surface area of just 2,100 m², ensuring the complete traceability of the over 150 customer's SKUs on the batches. All types of Estrella Galicia finished products are stored, from barrels to returnable products in crates, from cans to non-returnable glass products, which can be handled together on half pallets.

The combination of multi-level shuttles and the 4 double-pallet lifts in the front section, which connect the storage section with the entry and exit systems, allows the system to simultaneously handle an overall rate of 190 IN +240 OUT/h.

A long overhead infeed backbone connects the system's 3 input stations (1 manual and 2 automated, which collect finished goods directly from the existing line-ends through intermediate automated systems) to the warehouse.

A Just-In-Time approach is used to move goods towards the dispatch area (pallets are retrieved from the warehouse only when the truck actually arrives at the factory) by means of an SVL (System Vehicle Loop) system with 8 independent self-propelled shuttles.

This system ensures that all shipment operations are reactive and flexible, enabling the trucks to be loaded according to customer specifications.

The output loop also performs the restocking of the manual picking area in which any mixed pallets are prepared before being added to the shipment: a number of buffer stations inside the System Vehicle Loop ensure a correct operation sequencing.



TECHNICAL SPECIFICATIONS

Multiple depth warehouse:
11.000 pallets locations
9 levels of FRS shuttles (h=27 m).
8 SVL shuttles
190+240 pallet/h IN+OUT
JIT shipment