

CASE HISTORY

ECORNATURASÌ

Bologna - Italy

Grocery



The company

EcorNaturaSì was born from the merger of **Ecor** - the first wholesale distributor of organic and biodynamic products in the Italian specialized sector - and **NaturaSì**, the main Italian chain of supermarkets leader in the retail distribution of organic and biodynamic products. The company has a direct sale network on the whole Italian market with 250 shops branded NaturaSì. Over the last years, the group has experienced a major growth and today approximately 9,000 products are handled to meet the needs of a portfolio of approximately 8,000 customers. The main logistics hubs are located in Veneto and Emilia. The system supplied by System Logistics is located in Bologna.



Issues and Targets

EcorNaturaSì requested a system capable of following the company in its complex growth processes, which must be expansible and flexible, and capable of suiting the needs of a continuously evolving market, offering a high-level logistics service to customers.

The company decided for automation in order to ensure quality, to support the warehouse operators and to follow and meet the needs of a quickly changing market that requires improved customization.



The solution and the results

The automation project for **EcorNaturaSì** is divided into two areas: The first one is dedicated to package logistic management, and it is highly automated.

This area consists of an automatic depalletizer for removing single-reference pallets - for miniload refilling - with a production rate of approximately 650 cases per hour, 5 mini-loads developed over 110 meters in length and 10.5 meters in height, totaling a capacity of approximately 30,000 packages. The central aisle between the mini-loads is 3.5 m wide, with 1,500 pick faces on gravity roller conveyors. Here the refilling is directly carried out by the mini-loads, while picking is performed by the operators (manual picking).

The palletization of mixed code orders is carried out automatically by a dual robot, with a productivity of approximately 800 packages per hour and working on ROLs to serve the distribution logistics which is organized on cart deliveries.



This area consists of an FRS system for a fully automated pallet storage with a capacity of 700 pallet slots of approximately 700 units, a manual depalletization bay for tote preparation and mini-load refilling, 5 miniloads developed over 65 meters in length and 10.5 meters in height, with a capacity of approximately 14,000 totes. The totes coming from the miniloads are manually handled by operators in the order preparation bays, with a productivity of approximately 700 pickings per hour.

An automatic wrapping machine secures ROLs before shipment.



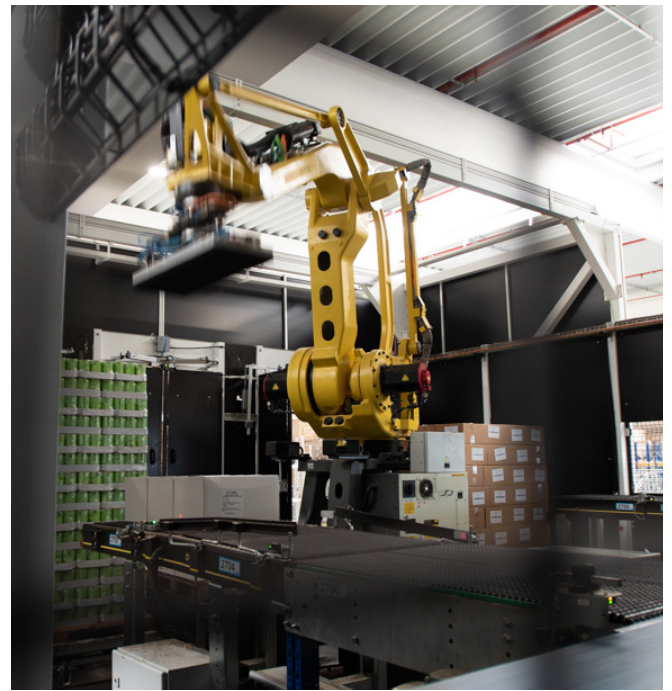
An automatic wrapping machine operates for closing ROLs before shipment.

The preparation of general groceries takes place in an automatic picking area coordinated by MOPS (Modular Order Picking System), that handles around 4,500 SKUs and is composed of a package warehouse with 5 miniloads and a dedicated automatic pallet loading and unloading area. The second plant area has been designed for logistic handling of individual pieces and is based on a goods-to-man logic where totes are housed in the miniloads.



Highlights

- › **System integrated management:** all departments can dialogue with each other, to optimize the overall goods flow.
- › **Article-targeted handling,** based on the rotation class.
- › **Automatic single package** depalletizing system with integrated vision system and gripper change for a wide variety of packages.
- › **No use of trays.**
- › **Space optimization** in relation to the high number of SKUs, and a targeted use of automation.



Technical features

• FRESH PRODUCTS

- › ARP System with 110 pick-faces.
- › Replenishment FRS with 384 pallet positions.

• DRY PRODUCTS

- › APS System.
- › Case Buffer - 61.000 cases.
- › 5 miniload cranes.
- › 1 automated de-palletizing station.
- › 1 automated Dual-Robot Palletizing station.
- › Carton Flow Picking Sytem.
- › 1.500 pick-faces.

• APS SYSTEM

- › Buffer casse - 29.000 cases.
- › 5 miniload cranes.
- › 2 manual palletizing stations.

• WMS

- › Software: Systore.

