

CASE HISTORY TOSANO MEAT Cerea, Italy GROCERY



The company

Born in 1970 as a small family-owned supermarket, Tosano Group is today one of the best rooted and expanding businesses in the North Eastern area of Italy, across the cities of Verona, Vicenza, Mantua, Brescia, Venice, Padua and Ferrara.

With its directly managed hypermarkets, it is one of the leading companies in the food sector. It offers consumers over 40.000 food SKU's with a vast choice of "big brands" and an ever increasing space dedicated to small and medium-sized Italian food producers.



Issues and targets

Having achieved the aims set with the first three plants delivered by System Logistics, Tosano Group identified the need to automate another sector which up to that time operated through manual processes: the meat.

Meat logistics has some particular characteristics: a cold environment (0°-4°) and storage carried out not with pallets, but with crates and cartons of various sizes, different thicknesses and, above all, holes and flaps that limit the stacking process. In addition, each product must be carefully weighed and the label scanned for verification.





The solution and the results

The whole pallets loaded on the entrance bays, coming in from suppliers, are sent through a buffering backbone to an operator bay and later sorted and directed to an island for automatic depalletization in layers or in alternative to two manual depalletizing islands. The packages leaving the stations are handled individually and conveyed to an innovative reading station, consisting of multiple cameras, which allows to store the images of all the labels on the package. The scanned and weighed packages are then handled individually and stored in a self-supporting package buffer consisting of 9 miniloads with a capacity of 40.000 packages. At the output, two automatic palletizing stations and two manual stations allow the creation of mixed pallets. The in-line palletising station is equipped with a downstream wrapper, therefore it does not require an integrated containment well.



The stackability limitations created by the non-homogeneity of the packages were first of all verified through in-house tests conducted with the customer's products and brilliantly overcome with the BestFitting software, an algorithm that governs the construction of pallets for each customer order and elaborates the optimal physical composition and therefore the correct palletization sequence, simultaneously evaluating different variables (weight, stackability, rules dictated by the customer, etc.).

The plant covers an area of 4.200 square metres, it operates at a temperature between 0° and 4°C and is sized to manage a daily flow of 15,000 picking packages.

Highlights

The solution implemented by System Logistics features some technologies that differentiate it from other intralogistics suppliers on the market: picking of individual packages.

The particular feature of the system supplied is the handling and storage of individual packages, boxes and cartons instead of entire pallets. It is all integrated with our automatic picking systems and best-fitting software for creating mixed pallets through an in-line palletising station without a well.



TECHNICAL FEATURES

- 9 Miniload
- 600 SKU's
- 40.000 Stock cases
- Self-supporting
- 4.200 Mq picking area
- 15.000 Cases/d handling capacity
- 2 Automatic in-line palletising stations with a downstream wrapper

