



The first automatic warehouse for Coca-Cola Hellenic Bottling Company.

Company

Coca-Cola HBC Italy is the most important producer and distributor of The Coca-Cola Company products in Italy. Its plant in Nogara (VR) is the most significant covering 50% of the production and distribution volume in Italy.

The plant was expanded and the warehouse today covers 35,000 m², including a new aseptic production line for the beverages Powerade (sport drink) and Nestea (iced tea). Following this expansion, the Nogara plant now covers a total surface area of over 62,000 m² and is a European record in the Coca-Cola Hellenic Bottling Group for production and storage capacity producing 500 million litres of beverages a year.

The task

Conventional storage of aseptic beverages normally requires sizeable ground space with considerably higher costs, as the palletized products cannot be stacked on top of each other because of their lower resistance.

Given the large-scale production at the Nogara plant, it would have required 14,000 m² storage space, seven times the space the new warehouse of 2,000 m² takes up. Another challenge was to integrate aseptic product management in the overall coordination of the other materials.

A dedicated shipping area was required from where the trailer trucks could be loaded with aseptic product.

The Solution & the Result

As a whole, the logistic structure consists of 15 platforms to load trucks that make small deliveries and 15 loading bays for trucks that feed the large customer park of wholesalers and the large-scale retail trade. In order to integrate the existing distribution capacity, a new shipping area for aseptic product loading was constructed, served directly from the new automatic warehouse. The new warehouse is composed of 2 stacker cranes with double the normal depth and 23 metres high with a maximum capacity of 900 kg, and 4 SVL shuttles at the top that connect the warehouse entrances to production and shipping. The plant was designed making allowance for future expansion to 4 mini load stacker cranes and double the storage capacity from the current 8,000 to 16,000 pallets. The products come into the warehouse from production through 2 loading bays fed by a lift truck capable of carrying 3 pallets at a time. The



incoming flow from production is 35 pallets/hour. At the entrance to the warehouse all the standard pallet conformity checks are carried out: weight, shape and forkability.

The shipping area is served directly by the SVL system serving 3 groups of bays with flow rack for pallet accumulation (15 pallets per rack). The product is loaded onto trailer trucks fol-



lowing the JIT logic, thus shortening the truck waiting time and reducing the space needed to prepare the loads.

The trucks are loaded from the side using triple-fork lift trucks able to guarantee an outgoing flow of 65 pallets/ hour serving 2 trucks at the same time.

The exit bay for the aseptic product, which must be loaded together with the other products, is managed in a dedicated shipping area. Thanks to the SVL system, it takes less time for the product to cross from the warehouse to the shipping areas.

TECHNICAL DATA

Main warehouse

Surface area: 2,000 m²

Length: 104 metres

Width: 15 metres

Height: 25 metres

Pallet slots: 8,096

Stacker cranes: 2

No. of SVL shuttles: 4

Flows: 35 pallets/hour in; 65 pallets/hour out

