



Case study: Havi Logistics

Mobile racks for continued growth at Havi Logistics

Location: Italy



Since its creation in Germany in 1981 as a small family business, Havi Logistics has expanded its market to become one of the leading suppliers of integrated logistics services, with 48 distribution centres in Europe and more than 5,000 employees. Its customers range from restaurant chains like McDonald's to BP service station kiosks. The company is growing so fast that it has had to expand its facility in Lodi, Italy, and it has entrusted this project to Mecalux.

Minding the essentials

Havi's logistics centre in Lodi, Italy, was opened in 2009 with a capacity for 4,566 pallets. Given the company's continuous growth and expanding customer base – and therefore the number of products to be stored and distributed – it quickly outgrew the facility. There was thus a clear need: to multiply the useful storage space by expanding the 4,870 m² available in the original warehouse.

Furthermore, the characteristics of Havi Logistics's activity had to be considered. Havi manages the supply chain for perishable and non-perishable products for a wide range of customers: frozen goods, fruits and vegetables, meat, dairy produce

and cleaning products, amongst others. This made it necessary to conserve storage and handling areas with four different temperature ranges, with a particular focus on preserving the cold chain the entire process to ensure optimal safety and conservation of the food that Havi stores and distributes daily.

This project began with a very clear need: to reduce storage costs, especially in order to accommodate new customers. The result has been the combination of conventional pallet racks with mobile racking. By combining these two kinds of racks the size of the building needed to work with a given volume of pallets can be reduced.

The answer

Mecalux's technical team calculated the facility's expansion and remodelling down to the tiniest detail. Since the customer's priority was to multiply its storage capacity the Movirack mobile racks stole the show. These racks boast optimal performance at all temperatures. The immediate result was to expand from the original storage capacity of 4,566 pallets to the current capacity of 12,500 pallets, enlarging the 4,870 m² of surface area to 10,000 m².

As required by the customer, the four distinct zones with different temperatures at the Havi Logistics centre in Lodi were conserved, but the layout of each one was changed by implementing various storage solutions tailored to the specifications of the different products:

- **Dry or ambient temperature zone:**

370 linear metres of Movirack mobile racks were installed in this zone to a height of 9 metres. This system eliminates unnecessary storage aisles, as the operator selects the aisle that he or she needs to use, whether manually or by remote control, and the mobile racks move laterally on rails embedded in the floor. This leaves the space required for loading, unloading or picking access on the selected racks. Push-back racks for accumulative storage and conventional pallet racking were also installed. In this way, high occupancy was achieved and goods handling time was reduced.

- **Refrigerated zone:**

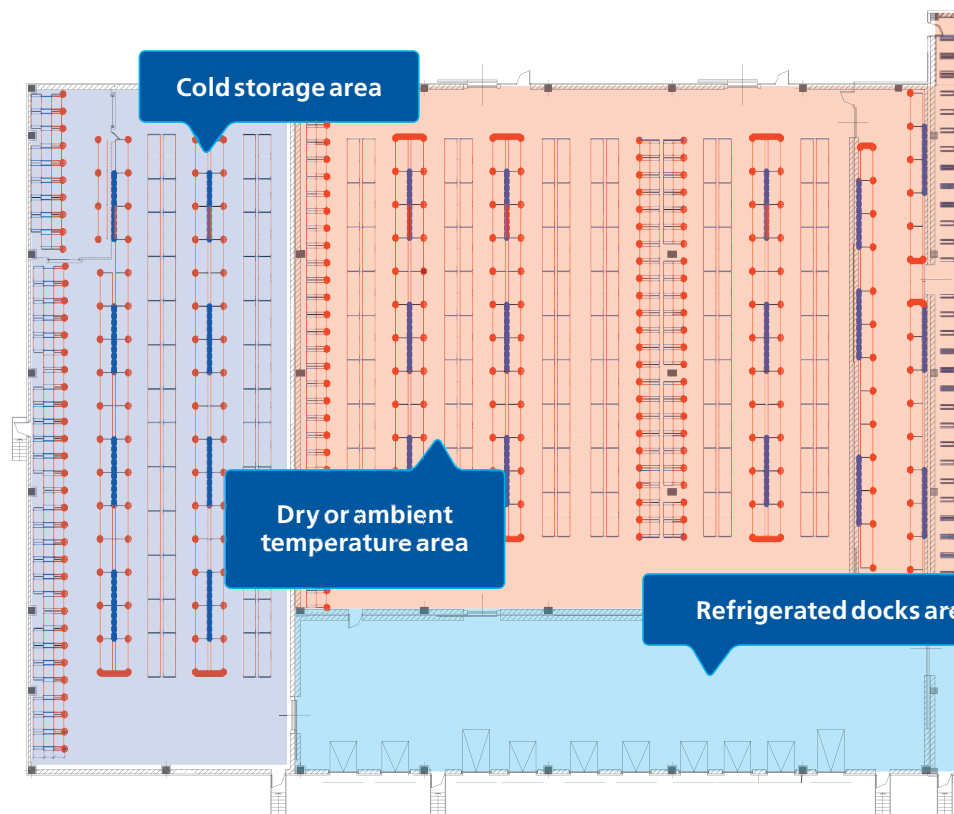
Movirack mobile racks combined with Push-back racks were installed here as well. This system allows four pallets per level to be placed in deep storage and uses the LIFO load management method (the last pallet in is the first out). The combination of both systems saves a significant amount of space and achieves high storage density while speeding the picking and replenishment of goods, which is essential in fresh food supply.

- **Freezing zone:**

in the cold storage area the Movirack mobile racks make it possible to reduce the volume that must be stored at low temperatures, thereby saving energy. Roller and trolley push-back racks and drive-in pallet racks were installed to round off this area.

- **Cool dock zone:**

this is a lengthwise loading and unloading zone linking the three storage areas described. Its function is to allow the goods to be handled without breaking the cold chain, which is kept at a temperature between 1 and 4 degrees. This mode ensures that

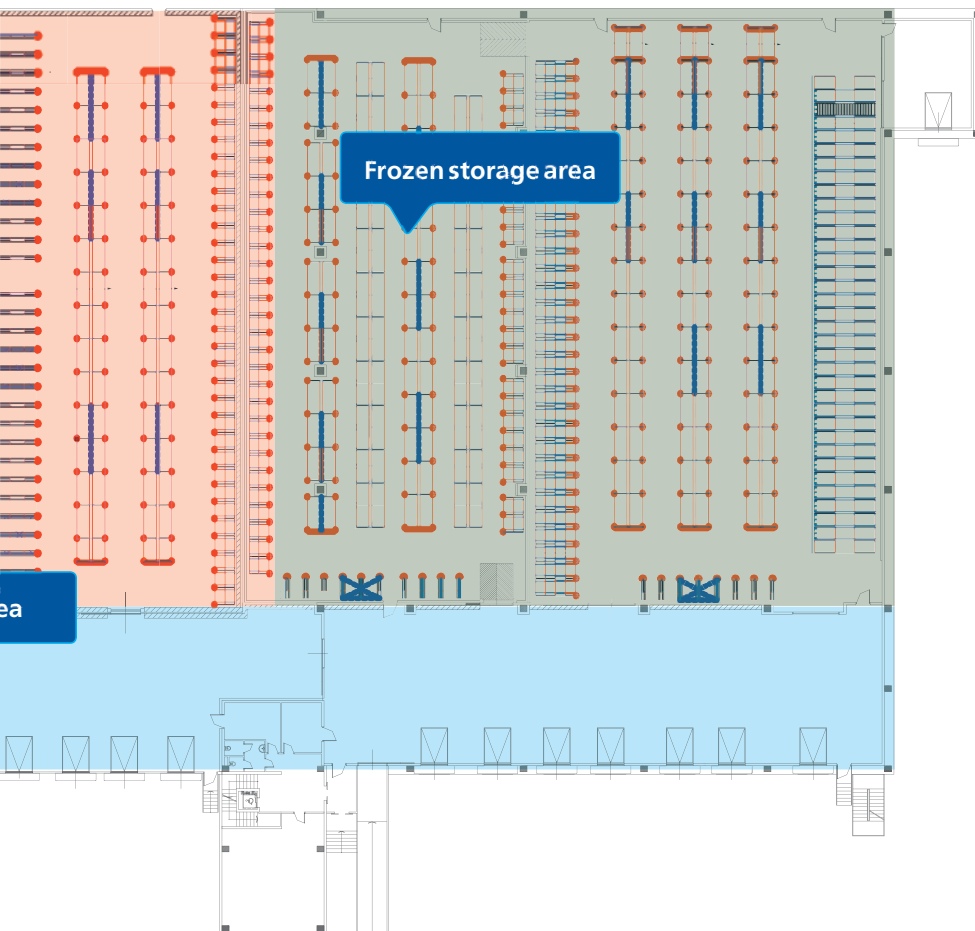


all products reach their destination in perfect condition.

- **Picking area without capacity loss:**

in this area there is a mix of conventional pallet racks, located on the sides, with Moviracks placed inside. The mobility and accessibility that the Movirack system offers frees up a wide aisle so that a forklift working with pallets can enter. It also opens all aisles so that operators carry out picking. Thereby, the area is set up to function both with pallets or smaller products that require picking.

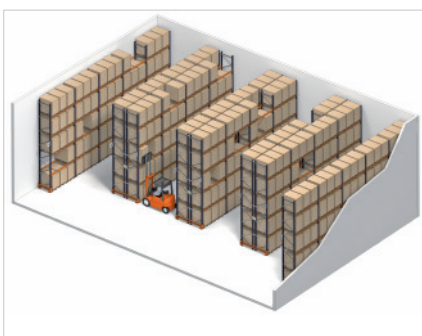
Mecalux has implemented a made-to-measure project that has allowed the Havi Logistics group to double the useful storage space and reap the benefits of a Movirack system on mobile bases



Push-back system with shuttles



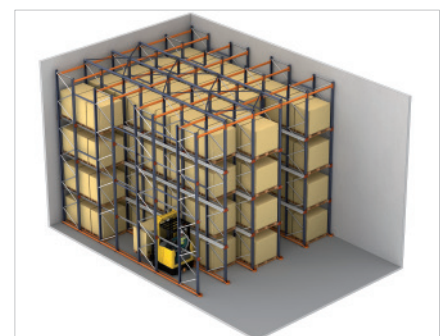
Push-back system with rollers



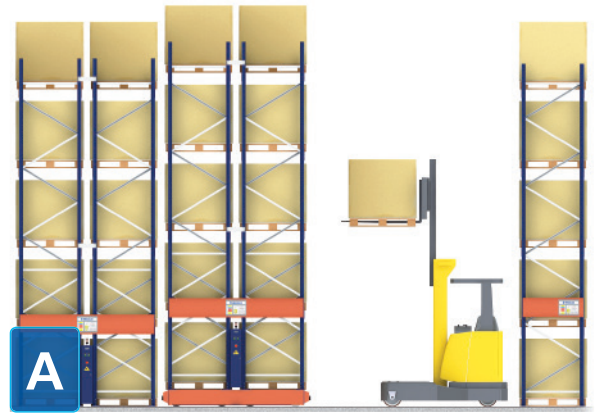
Conventional pallet racking



Movirack mobile pallet racking



Drive-in pallet racks



The first diagram (A) shows the solution where only one aisle is freed up to operate with a forklift. In the second (B), this option displays when two aisles are opened up to do picking.

Advantages for Havi Logistics

- **Increased storage capacity:** the Havi Logistics warehouse has almost tripled the storage capacity, from 4,566 pallets to 12,500 pallets, doubling the surface area from 4,870 m² to 10,000 m²
- **Profitable model:** the distribution centre Havi Logistics has in Lodi has become a model of profitability and efficiency that will allow the company to manage future growth in a flexible manner.
- **Cost savings:** with the remodelling and expansion of this installation, logistics costs have been reduced without affecting the service quality of the company and maintaining a high level of productivity.



Technical data

Storage capacity	12,500 pallets	No. of Movirack mobile racks	12 double
Length of the warehouse	152 m	No. of push-back racks	9
Width of the warehouse	62,5 m	No. of drive-in racks	3
Height of the warehouse	12 m	No. of fixed conventional racks	20
No. of racks	60	Pallet size	800 x 1,200 x 1,650/2,300 mm
No. of aisles	33	Maximum weight per pallet	1,000 kg
No. of load levels	3, 4 and 5		