

Case Study: Malfatti & Tacchini

The operational efficiency of the new Malfatti & Tacchini logistics center

Location: Italy



The new Malfatti & Tacchini warehouse, an Italian company specializing in hardware and security items – mainly locks – has been designed to meet its current logistical needs, as well as to deal with the growth forecasts and expansion in the future. The primary objective posed to Mecalux was to speed up picking operations. For that reason, the installed pallet racks offer direct access to the stored goods and allow swift order preparation.



Needs of Malfatti & Tacchini

Malfatti & Tacchini was founded in Italy in 1908 and over the years has established itself as a leader in the distribution of security and hardware items.

The company required a warehouse with a capacity for more than 30,000 SKUs, as well as an efficient picking system that would allow the preparation of more than 200 orders per day, for a total of approximately 4,000 lines of products.

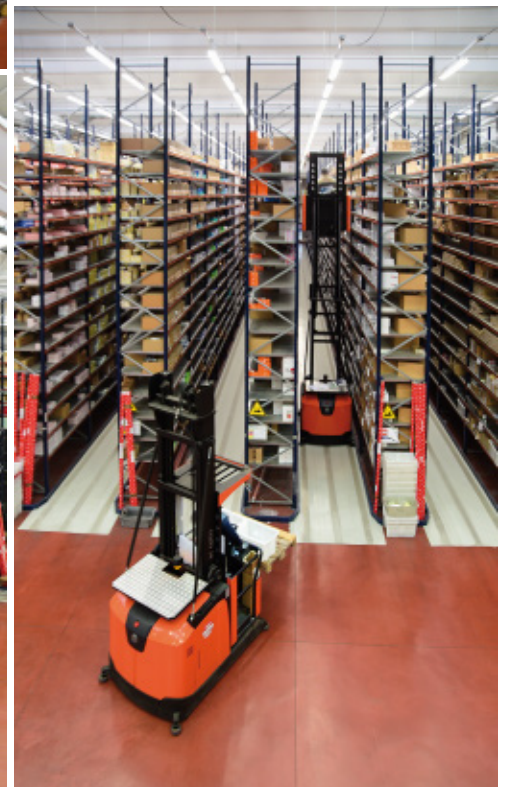
Warehouse distribution

Mecalux has equipped the center with pallet racks that are organized into two distinct areas:

- Specific picking racks for small and medium-sized goods.
- Racks for large volume palletized loads or those of relevant quantities.

On the side of the building, there are the reception and dispatch docks, working in different time slots to avoid interference between the two operations.

Also, the warehouse has a wide preloads area on the ground floor, where pallets are packed and prepared for their subsequent shipment.





Loaded pallet racking

In this area, seven double and two single 31' high, 174' long racks were installed with capacity for more than 4,000 pallets. In these racks, high-volume goods and consumer products delivered in complete boxes are stored. Picking is done at all racking levels by order pickers.

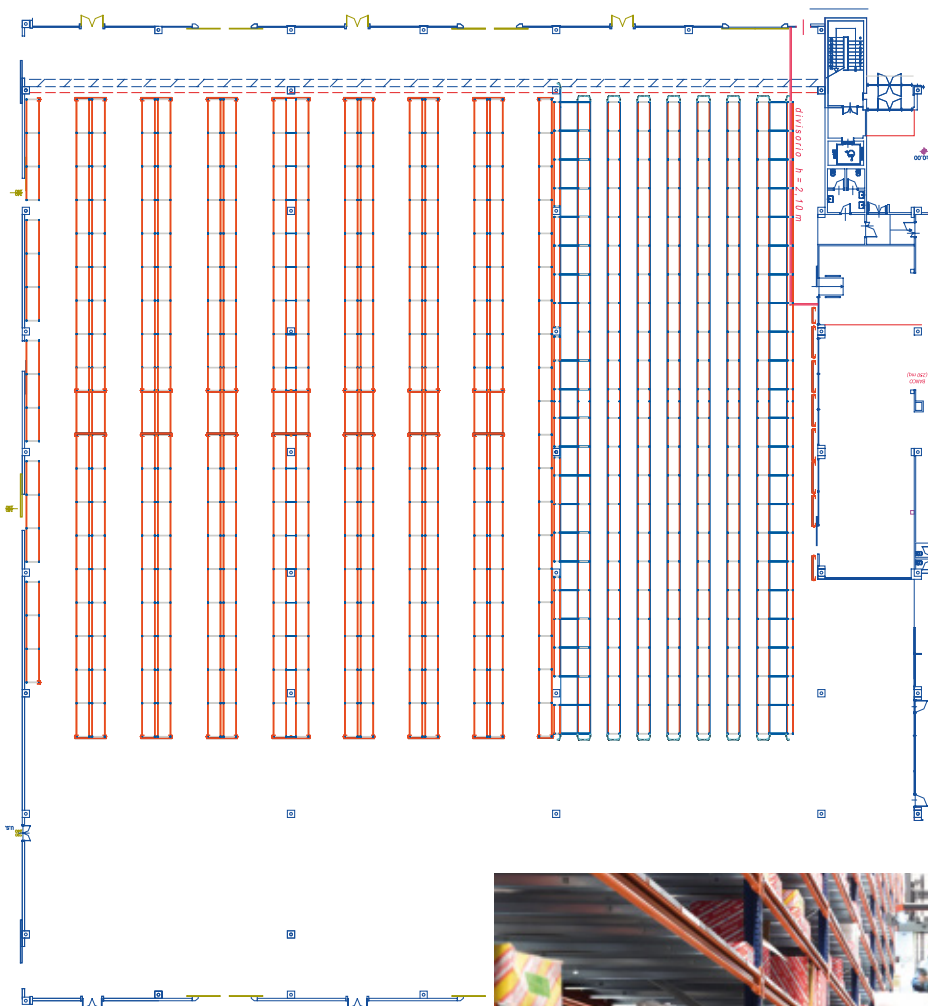
The direct access to the load afforded by pallet racking provides flexibility in the preparation of orders.

As a safety measure, an intermediate passageway was set up in the palletization area and the picking zone that serves as the emergency exit and facilitates rapid evacuation if necessary.

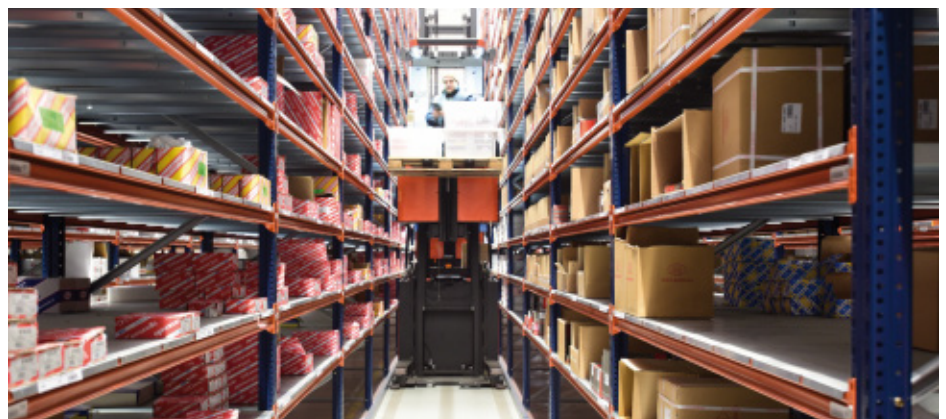
Picking area

There were seven double-deep and two single-deep racks installed, which are 29.5' high and 174' long reserved for the principal warehouse operation: picking. They consist of 16 levels with galvanized metal shelves for the storage of smaller goods, with a 1,367 lb capacity per level. Operators access products at heights with the help of order pickers, which are adapted for picking in an ergonomic and safe position. Workers prepare orders by waves, i.e., several orders at a time, to optimize the route along the locations within the facility.

The operator stands on a platform and, on the one side, places goods in the containers that make up each order. And on the other side, they access machinery controls to direct the machine to the corresponding locations, following the instructions transmitted by the RF terminal. Finally, orders coming from the two different storage areas are routed to the joint consolidation area where they are prepared and sorted.



The order prep machines at heights need to be guided into the aisles via mechanical guides





Advantages for Malfatti & Tacchini

- **Direct access to goods:** installed racks offer direct access to the stored goods, allowing very quick order prep.
- **Large capacity:** the facility has a capacity for more than 30,000 different SKUs, including more than 4,000 stored on pallets.
- **Nimble picking system:** the distribution of shelves and the use of specific machines streamlines the preparation of orders.



Technical data

Storage capacity	4,388 pallets
Pallet size	31.5" x 47" x 61"
Max. pallet weight	1,554 lb
Racking height	31'
Racking length	174'

