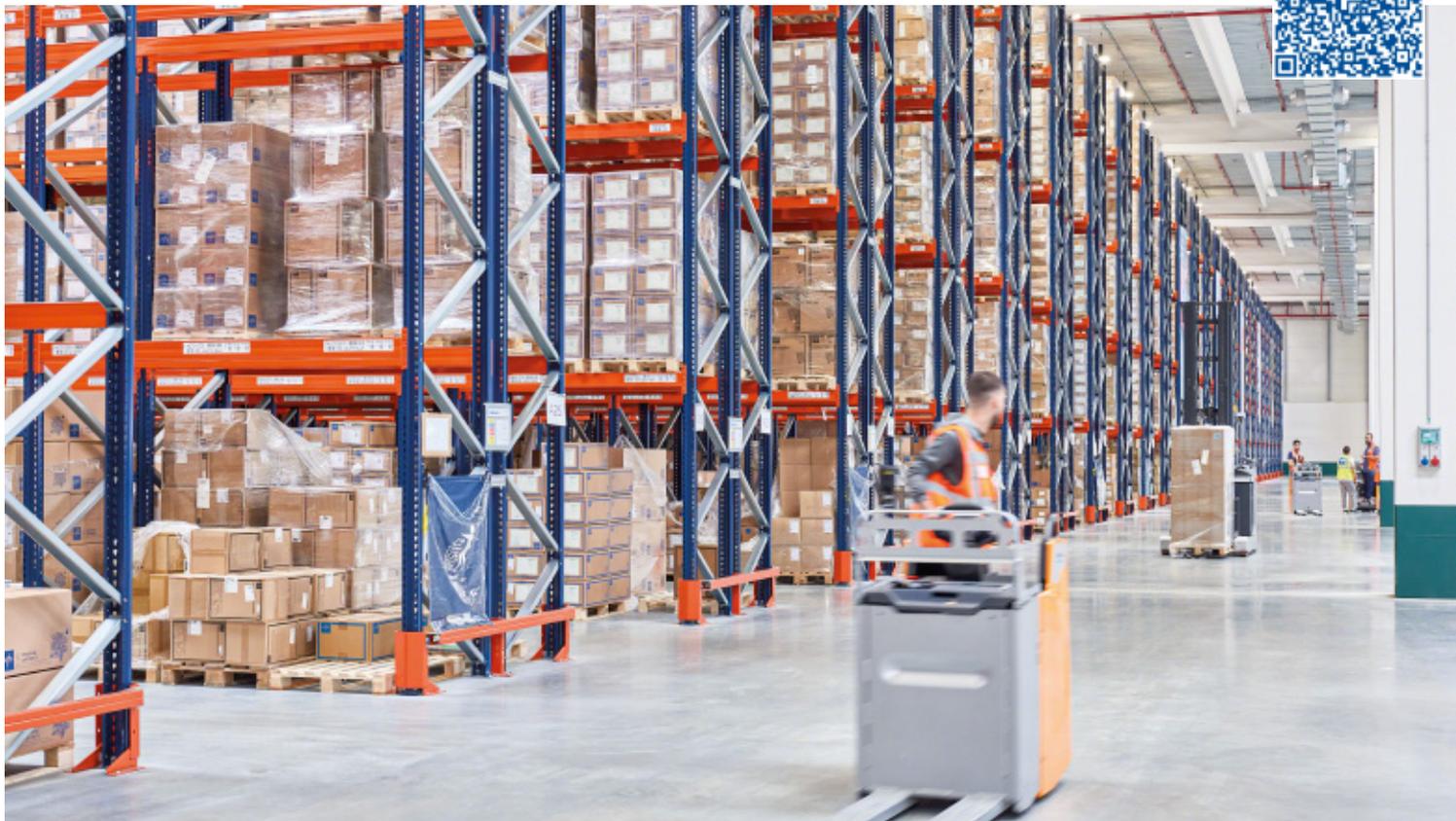


# Three storage systems to reduce delivery times to hospitals

Medline, an international leader in the manufacture of medical materials and devices, stores over 50,000 pallets on seismic racking.

Country: **Italy** | Sector: **healthcare**



## CHALLENGES

- Store **thousands of SKUs** of different sizes and weights.
- **Manage and distribute** medical and surgical products efficiently.
- Install a **storage system** in a logistics facility located in a **seismic area**.

## SOLUTIONS

- **Pallet racks.**
- **Carton flow rack levels.**
- **Picking shelves.**

## BENEFITS

- Capacity to store **15,000 SKUs on 50,000-plus pallets.**
- **Daily fulfilment of 200 orders with up to 100 lines each.**
- **Reinforced storage systems** to withstand any potential seismic activity in the region.

Founded in the US, Medline is a multinational manufacturer and distributor of surgical and medical devices. Its merchandise includes gloves, masks, operating room personal protective equipment (PPE), sterile instruments, and patient care solutions. In 2011, it created Medline Europe to distribute its goods in 27 countries on the continent. In Europe, the company has four manufacturing plants and six warehouses that ship more than 820,000 boxes and 370 containers a month.

» **Founded: 1910**

» **International presence: 125+ countries**

» **No. of employees: 30,000+**

Medline, a global leader in the production and distribution of medical devices and materials, has opened an 11.1-acre logistics center in Piacenza (Italy) to cope with increased demand. In line with its ongoing expansion strategy, the US multinational company decided to build its first warehouse in Italy. Its goal was to strengthen its foothold in the country and facilitate logistics operations.

Prior to building the new facility, Medline only had a commercial office in Florence. It would supply Italian hospitals from its logistics centers in other countries. "Our main logistics need was to have a warehouse in Italy that would enable us to deliver to hospitals in the country as quickly as possible. Before, lead times were too high," says Diego Leanza, Director of Medline Piacenza.

To shorten the delivery times of medical supplies, Medline has equipped its Piacenza facility with Mecalux storage systems. These

solutions boost productivity and streamline operations such as order processing. In addition to scaling up storage capacity, the multinational company needed a versatile, robust system that would store extremely varied merchandise. "We have more than 15,000 SKUs, most of which are hospital supplies such as surgical drapes, gloves, masks, gowns, hospital staff PPE, surgical instruments, and diagnostic tools," says Leanza.

With these logistics requirements, Medline opted for three warehousing solutions to improve goods management: pallet racks, picking shelves, and levels of carton flow racks. "We installed three different storage systems to divide our logistics center into distinct zones. This has allowed us to better classify the merchandise we have in stock and efficiently organize order picking tasks," says Leanza.

The racks provide direct access to goods, expediting putaway and picking. The aisles are designed to facilitate operator maneuvering when storing or removing products from their locations with the help of reach trucks. "The Mecalux storage systems have brought us a whole host of advantages. I'd highlight excellent space utilization and effective organization of medical and surgical materials based on our needs," says Leanza.

The last requirement Mecalux was tasked with fulfilling was earthquake protection. This Medline facility is located in a seismic area, so the racks had to be engineered to meet the highest safety standards. In compliance with Italian standard NTC 2018 and European standard EN 16681, the storage systems were carefully designed and reinforced to endure any possible ground motion in the region.

### **Storage for over 50,000 pallets**

The Medline warehouse stands out for its high storage capacity: 51,643 pallets. "We use the pallet racks to house full pallets sent to customers," says Leanza.



The pallet racks stand 32.9' tall and occupy a large part of the Medline logistics center's floor space. "We receive and ship around 1,200 pallets a day," says Leanza. The new distribution of space and the organization of operations have been decisive for efficiently managing such a considerable number of movements.

Mecalux personalized the storage levels to accommodate goods of two different heights: 2.6' and 6.6'. The racks are set up in the center of the warehouse, with the end sections allocated to receiving and shipping.

On both sides of the logistics facility are two vast zones for Medline's inflow and outflow operations, with ample space to prevent interference between the two. Given the volume of inbound and outbound movements, both areas are equipped with 38 docks to expedite truck loading and unloading.

**Order picking of medical products**

"Every day, we fulfill 200 orders, each containing multiple lines — up to 100 items," says Leanza. Operators retrieve goods from picking shelves and the carton flow rack levels, two storage solutions specifically designed to facilitate this operation.

"The picking shelves house merchandise used to fill smaller orders," says Leanza. The direct access to goods enabled by this storage solution makes operators more productive when picking.

On the lower sections of some of the pallet racking units, Mecalux installed levels of carton flow racks. These consist of slightly inclined storage platforms. Operators place goods on the higher end, and they slide by gravity to the picking side. The advantage of this solution is that reserve merchandise is housed on the same level, behind the first box, so stock is always available.



*"The storage systems have brought us a whole host of advantages. I'd highlight excellent space utilization and effective organization of goods according to our needs. We're extremely satisfied with the Mecalux solution. And we were particularly impressed with the racking assembly process, which was highly professional and organized."*

**Diego Leanza**  
Director, Medline Piacenza



The carton flow rack levels also fulfill another function: "We use them to store customer returns and damaged products temporarily," says Leanza. This storage system greatly simplifies goods management. By removing the first box, the others automatically move to the operator's picking position, ensuring that items are always within reach.

**Logistics at the service of health**

"We're extremely satisfied with the Mecalux storage systems. And we were particularly impressed with the racking assembly process, which was highly professional and organized," says Leanza.

The expansion of storage capacity has resulted in improved operational performance for Medline in Italy. The US multinational has ramped up throughput and cut lead times, essential factors for meeting customer demand in the healthcare industry. With its new warehouse in Piacenza, the business can quickly supply hundreds of hospitals and medical centers in Italy and drive its growth rate across Europe.