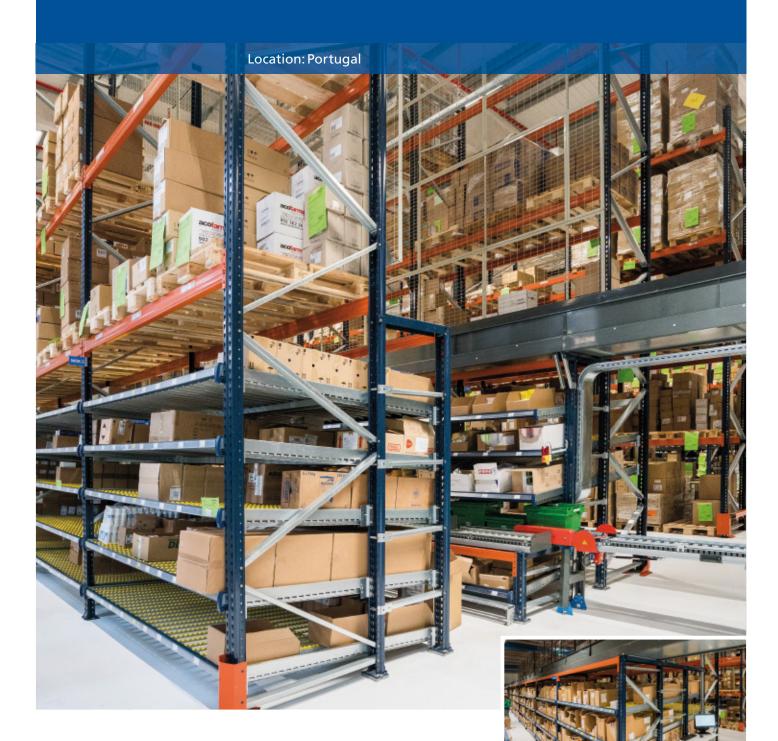




Case study: Alliance Healthcare

High-performance in the Alliance Healthcare picking facility



The logistics center of Alliance Healthcare in Lisbon (Portugal) is dedicated to picking. Mecalux has provided all the storage equipment within the installation: light-duty shelves, carton flow racks and selective pallet racks for reserve palletized goods. A conveyor circuit links the different areas of the center and moves prepared orders to the consolidation and dispatch area.



Pharmaceutical industry supplier

Alliance Healthcare Portugal is an association between the Walgreens Boots Alliance (49%), the National Association of Pharmacies (49%) and José de Mello Participações II, SGPS (2%).

Specialized in wholesale pharmaceutical distribution, this company has a huge presence in the European market.

As the leading pharmaceutical distributor in Portugal, it employs close to 460 personnel and has warehouses in Alverca, Porto, Almancil and Castelo Branco. Its mission is to distribute medicine and healthcare

products to more than 2,000 pharmacies spread throughout the country.

The logistics center

The company needed to achieve maximum storage capacity in its logistics center located in Lisbon, classifying products by SKU type and turnover, besides streamlining the preparation and consolidation of orders.

The warehouse is sectored into five different areas. In two sectors, set aside for type A products, Mecalux has provided light-duty shelves and carton flow racks, which house products supplied by the automatic single-box dispenser.

The Alliance Healthcare warehouse is sectored into five zones to organize each range of products according to its level of demand and dimensions









In the other two, dedicated to type B and C $\,$ products, carton flow racks were installed with two attached conveyors and light-duty shelving units for the lower consumption boxes.

Finally, there is an area with selective pallet racks where reserve pallets are stored.

The automatic conveyor circuit runs through all warehouse zones and moves finished orders to the consolidation area.

Operators work by zones, only picking in the area they have been assigned





Type A products

The picking of A products is done automatically. Operators only replenish items, ensuring there is always stock available for operations being carried out.

Type A products are consumer products and, in turn, within A products, some SKUs are more in demand than others. For this reason, storage solutions were matched with each particular product.

Those in highest demand are deposited in carton flow racks.

Comprised of slightly inclined roller track frames, this lets boxes slide via gravity inside the storage lane.





This warehouse operates with a large number of A type SKUs, so it was essential to install a fast, efficient order prep system



Operators remove items from inside the first box and place them in the corresponding carton compartment from the automatic box dispenser. The advantage of this storage system is stock reserves are housed on the same level, behind the first box, meaning product is always there for the taking.

Meanwhile, lower consumption SKUs are warehoused in light-duty shelves. They measure only 7' high, which facilitates access to the boxes that are distributed in the automated system.









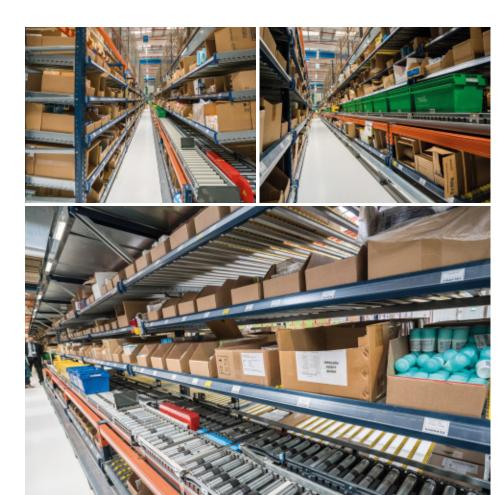
Type B products

In this area are the shelves with carton flow channels and a circuit of roller conveyors placed alongside, whose function is to move completed orders to the consolidation area.

Parallel to the main conveyor, there is another conveyor with free-moving rollers that acts as a prep table for operators to manually move the boxes to the most comfortable position.

This zone is sectored and a different operator works in each sector. Using a radio frequency terminal, operators identify the order they are going to work with, and the warehouse management system (WMS) tells them what products they need. Then, they collect the products from the shelves arranged on both sides and put the items inside the picking container. Once finished, they leave it on the main conveyor, so it flows to the next sector if more product is required. Otherwise, it moves towards the consolidation area.

Replenishment takes place in the loading aisle, on the side opposite to the picking tasks. Operators introduce the boxes into the corresponding level, and these move autonomously to the other end.



Carton flow racks avoid interference between replenishment tasks and the gathering of material, when carried out in different working aisles



Type C products

Very low turnover products are mostly stored on light-duty shelving units. This ergonomic solution facilitates the classification of products and the picking of orders.

Carton flow racks have also been installed and, in the same way as the sector containing B products, a conveyor circuit runs along the lower level.

Operations are also very similar, but in this case, operators from each sector crisscross the aisles assigned to them to pick the items from the shelves and place them into the order container. Subsequently, the conveyors transfer the completed order to the consolidation area.

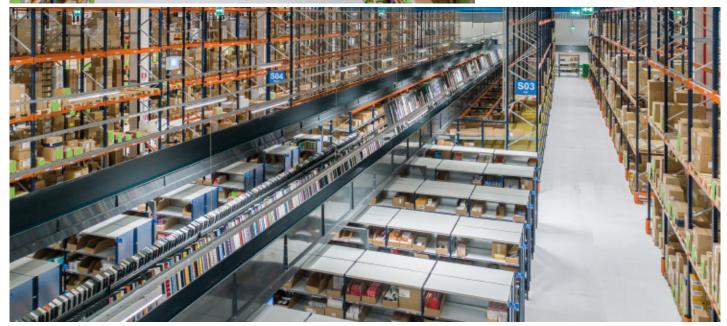


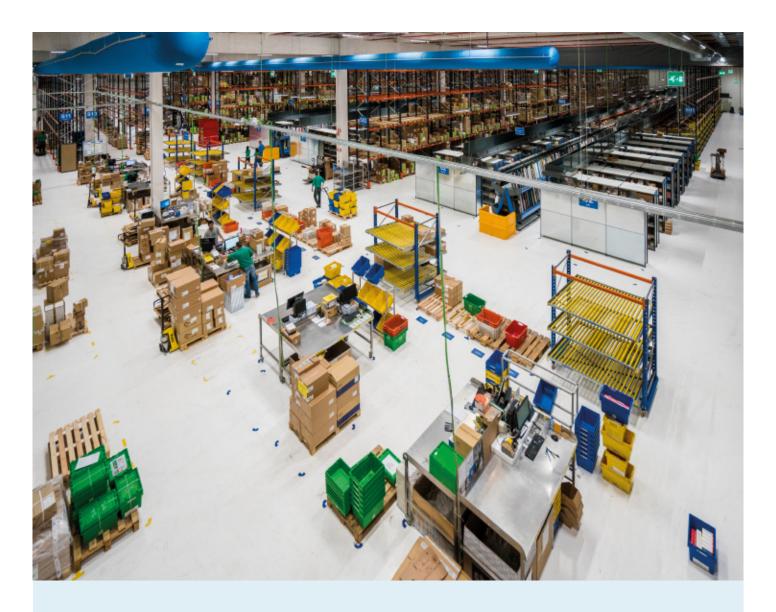
Reserve stock

Although carton flow racks hold a part of the reserve boxes, the rest of the product is stored on pallets in the top levels of selective pallet racks in specific areas.

Levels with pallets, which face the picking aisle, have stops and protective mesh in place to avoid the accidental fall of merchandise.

The selective pallet rack system provides direct access to the SKUs, which streamlines storage tasks and guarantees a perfect stock control, since a single product is deposited in each location.





Advantages for Alliance Healthcare

- Adaptable operations: the sectored warehouse is highly flexible in terms of picking orders, as each area is assigned a number of shelves and operators.
- Efficient order picking system: the distribution of the goods, according to their characteristics and demand, optimizes the movements of the operators and maximizes picking.
- Access to merchandise: direct access to the products is essential to speed up picking.



Storage systems

Selective pallet racks

Carton flow racks

Light-duty shelves



