



Case study: PCAMI

Tactical picking operations at the Spanish
quartermaster's depot

Location: Spain





Mecalux has equipped one of the PCAMI (Quartermaster Corps Material Supply Centre and Depot) installations with live storage for picking and a conveyor circuit. The objective of both solutions is to streamline picking throughput, the chief operation of this centre.

picking, since operators do not need to go all over the warehouse collecting items for each order. Instead, they working only in one specified zone.

About PCAMI

Founded in 1873, the Quartermaster Corps Material Supply Centre and Depot (PCAMI) is the logistics unit of the Spanish national army. It is in charge of furnishing equipment and material military personnel who are serving out missions.

high number of items, including garments and uniform accessories, combat rations, insignias and flags, as well as material for barracks, encampments and logistics, in general.

In all, six picking stations line the conveyor's length: two individual stations, plus four grouped together –one in front of the other and split down the middle by the main conveyor.

This military unit needed a storage system that would guarantee massive throughput of materials ordered from the centre, located in Madrid. Here, it houses a very

The solution

After an in-depth analysis of the requirements submitted by the Spanish armed forces, Mecalux supplied three blocks of live storage for picking and a conveyor circuit. These solutions provide fast order

Stations consist of non-motorised roller conveyors, letting operators manually slide boxes to the most comfortable position. Each has an assigned number of racks and operators, which fluctuates depending on how many orders must be put





together. Personnel use a hand-held device to identify the order to be processed and a computer indicates which products are required.

Once a part of the order is completed in one of the stations, the boxes are inserted onto the central conveyor, which transfers them automatically to the next station where it will be filled with more products for that order.

The 2.5 m high racks contain four inclined levels, comprised of roller track platforms to let boxes slide via gravity. Sloped display trays are also available, which ease access to merchandise inside the boxes.



Locations include pick-to-light devices that guarantee top picking workflows. The displays show operators the exact number of products that must be extracted from each box

Replenishment of goods

The loading aisle is where replenishment takes place, opposite to the one for picking orders. Operators insert boxes into the different levels and these move to the opposite end on their own. The main advantage of this system is picking and replenishment of goods can be executed at once, without any interference between the two operations.

Palletised reserve products are housed in an area adjoined to this site, kept on-hold until they are required to replenish the racks.

Automated management

The centre's WMS is in permanent contact with the Galileo control module from Mecalux, tasked with issuing movement commands to the conveyor circuit and directing boxes to the corresponding picking stations.





Advantages for PCAMI

- **Space optimised:** the depot's full surface area is optimised to make picking tasks very efficient and to obtain a large capacity to accommodate the high number of SKUs.
- **Accelerated picking system:** the automatic conveyor circuit streamlines the movements of operators during order picking.
- **Efficient picking:** the pick-to-light devices guide operators around-the-clock and minimise errors stemming from manual management.



Technical data

Racking height	2.5 m
Racking length	25.3 m
Racking width	1.7 m
Conveyor speed	60 m/min

