

Case study: Banco Sabadell

Banco Sabadell owns the sector's best state-of-the-art document archive thanks to Mecalux

Location: Spain



Mecalux has built the new document archive of Banco Sabadell based on a warehouse concept that combines simplicity and innovation. The design prioritises agility in search tasks, efficient handling of documents and improved ergonomics for the operators. This solution, designed with pallet racking containing perforated shelves, has increased throughput while reducing operating costs.

The need for a new warehouse

Initially, it started out as a traditionally built archive consisting of racks with various levels of walkways, access ladders and platforms at strategic points to raise boxes placed on pallets.

With such little agility offered by this constructive system and to make full use of storage space, racks were installed that occupy the entire height of the building served by order picking forklifts. The racks are 11.5 m high and have 15 levels with a capacity for 36 file boxes.



The storage capacity is greater by assembling racks that occupy the entire height of the building

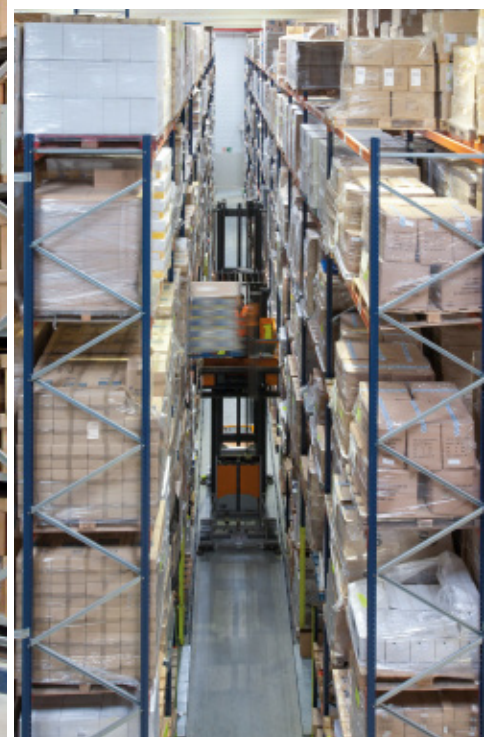


Access by order picking forklifts

The order picking machines, which run through the aisles guided by side profiles, have a cabin where the operator works and front facing forks that carry the pallets. The operator raises with the cabin to the level required and manually handles the boxes containing the documents. Thus, the filling of boxes is much simpler.

On the other hand, if the boxes that arrive at the centre are not on pallets, they are placed on a pallet that the operator takes to the aisle and the corresponding location using the order picker.

When the boxes have been stored, the operator informs the system where they have put each box, although they have previously notified the warehouse management system (WMS) of its content.



Fire safety system

The fire safety system uses automatic sprinklers located on the ceiling of the building. This system has enough spray capacity to put out any fire outbreak in the shortest time possible because the racks have perforated shelves, allowing the passage of water between levels.

Furthermore, being a vast archive, it was divided into sectors with fireproofing and sectoring curtains installed at the top.

Between the racks, there are intermediate passageways enabled that allow quick access to emergency exits if necessary

Collaboration between Banco Sabadell and Mecalux

The partnership between Banco Sabadell and Mecalux has been forged over many years both financially and in terms of service delivery, i.e. providing storage and archiving systems.



Image of fireproof curtains and perforated shelves



WMS features

The warehouse management system facilitates access to the various documents. To do so, the operator finds out where the file is positioned and using the order picking machine accesses the appropriate level and location. Once reaching the appointed place, they use the pallet as a table to support the boxes and collect the needed document.

When the operator has finished their work, the boxes are returned to the original spot.

During removal of a document, the operator can insert another in its place, provided that it informs the WMS of all movements made.





Advantages for Banco Sabadell

- **Large storage capacity:** the new archive can store 658,236 boxes.
- **Space optimisation:** the racking, with 15 levels that are accessed by order picking forklifts, makes the most of the building's height.
- **Safety first:** the archive has an advanced fire sprinkler system located on the ceiling of the building. Intermediate access passageways are enabled between the racks leading to emergency exits.

 **Sabadell**

Technical data

Total box capacity	658,236
Box capacity per level	38
Load capacity per level	720 kg
Racking height	11.5 m
No. of levels high	15
Handling equipment	order picker



The old, traditionally constructed archive