



Case study: JAS-FBG S.A.

Two different storage systems in the JAS-FBG S.A. logistics center

Location: Poland



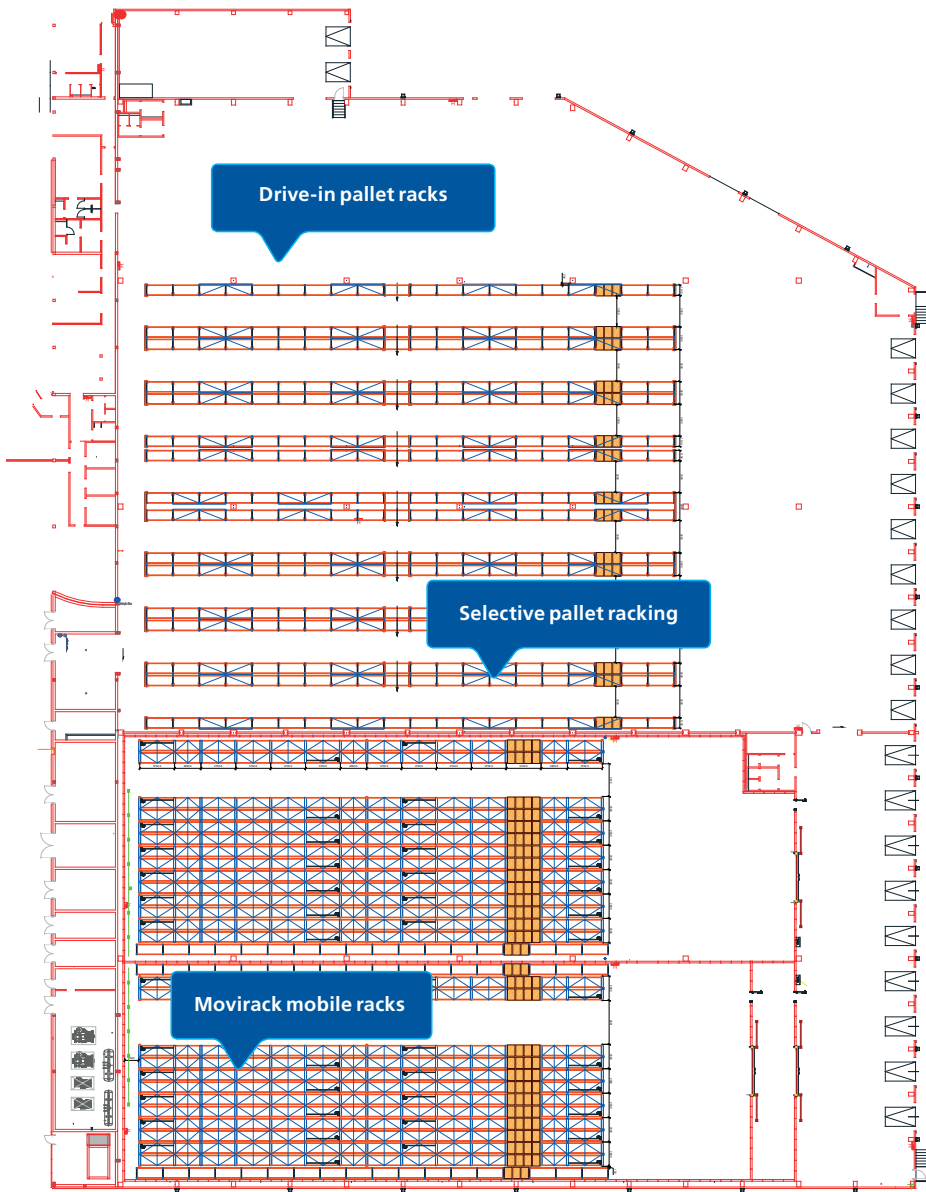
Mecalux has installed selective pallet racking and Movirack mobile racks in the logistics center of JAS-FBG S.A. The combination of both solutions allows for maximized storage capacity and increases productivity, by classifying the products according to size and turnover.

About JAS-FBG S.A.

JAS-FBG S.A. is a Polish logistics operator that opened in 1991. As a result of having expanded its distribution network, its warehouses are spread all over the country.

Recently, the company built a new 2.47 acre logistics center in the town of Warszowice (Poland). With a superb location on an important transportation hub, this facilitates the southward distribution of products in the country.

The company requested the collaboration of Mecalux to achieve a large warehousing capacity for the varied products of its customers, as well as to expedite the storage and management of the merchandise.



The logistics center

Mecalux has supplied two different storage systems that coexist in the same installation: on one side, selective pallet racking and, on the other, Movirack mobile racks.



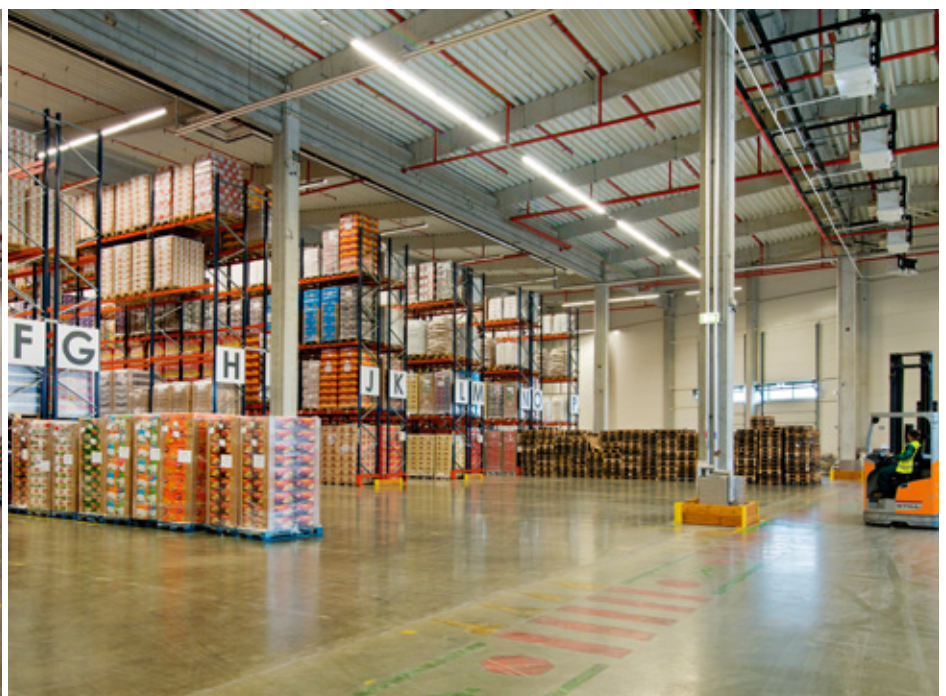


Three chambers work at a controlled temperature (ambient, refrigerated and frozen). To access the frozen storage chamber, operators must cross a SAS—a pre-chamber with two fast action doors that are never open at the same time— whose purpose is to avoid abrupt changes in temperature, loss of cold and condensation.



In front of the loading docks, a large reception, consolidation and dispatch area has been set up, where pallets from the same order or route are grouped together to speed up the loading of distribution vehicles.

By having two different storage solutions, pallets can be organized according to the customer they belong to, their size, characteristics and turnover

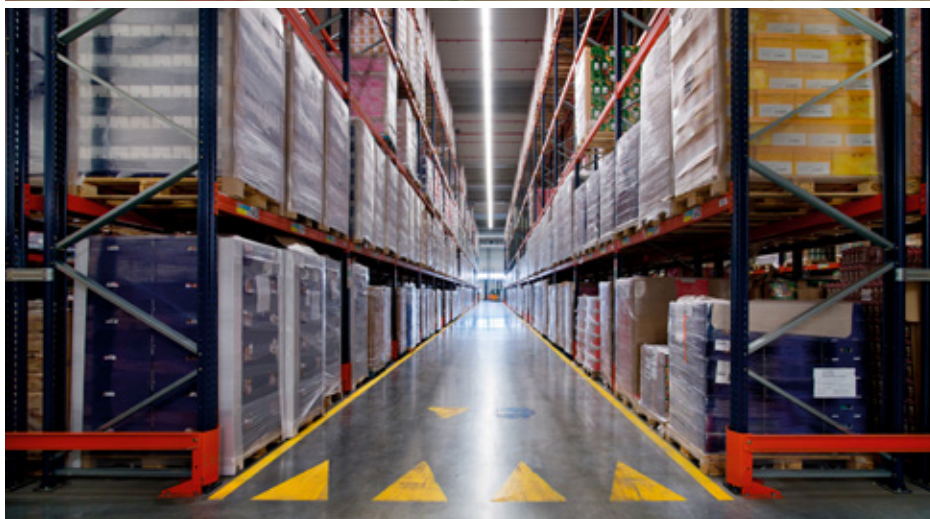


Selective pallet racking

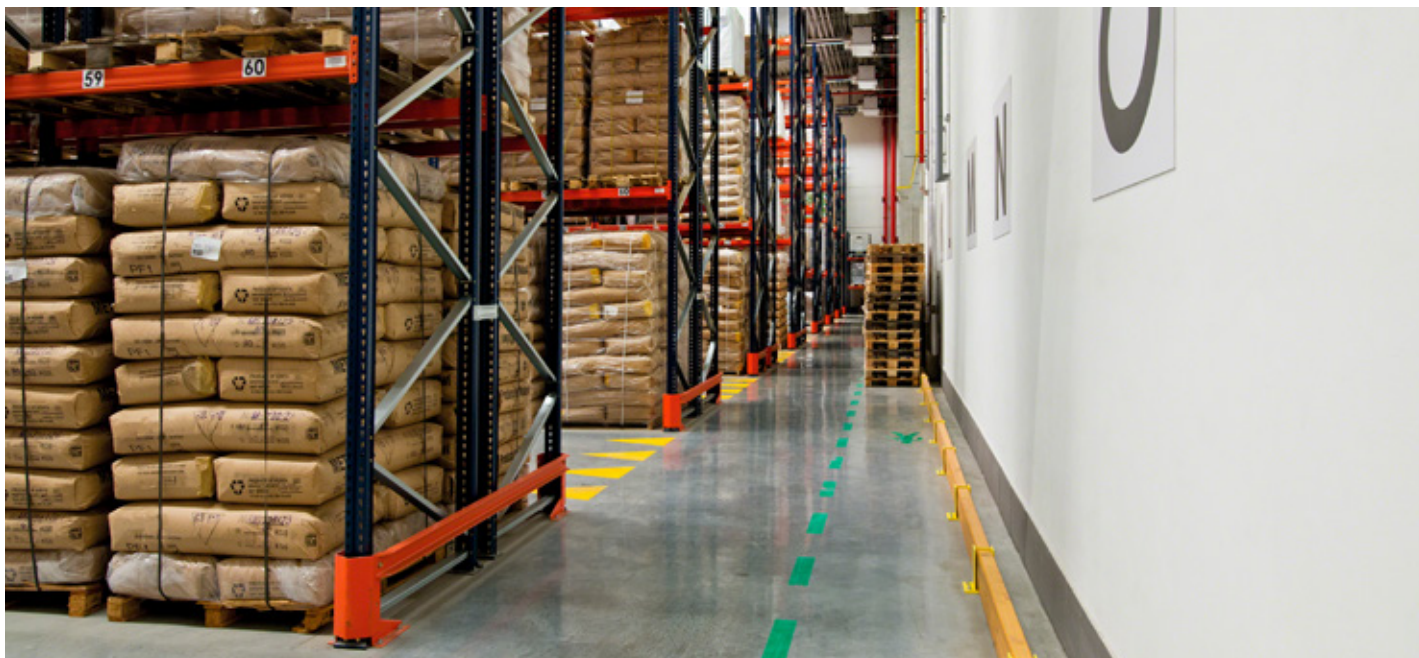
A total of 4,800 pallets, each with a 1.1 t maximum unit weight, is the storage capacity offered in this installation. Specifically, these seven double-depth pallet racks and two single-depth ones are 29' high and 190' long, installed by Mecalux.

The company operates with pallets of different sizes and turnovers. For this reason, selective pallet racks were chosen due to their versatility and adaptability to any load. In this system, a large number of pallets are deposited with many different SKUs.

Due to the great length of the racks, a passageway has been opened at the rear of the warehouse, which facilitates the movement of the operators and functions as the emergency exit.



Selective pallet racks stand out for their direct access to all the products, which fuels storage tasks and provides perfect stock control, since each location is assigned a single SKU



On one side of the selective pallet racks, JAS-FBG S.A. stores consumer goods in a block of drive-in racks.

Operators follow the instructions of the warehouse management system (WMS) via a radio frequency terminal, which always tells them which locations to go to.

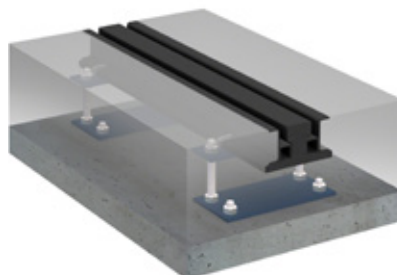




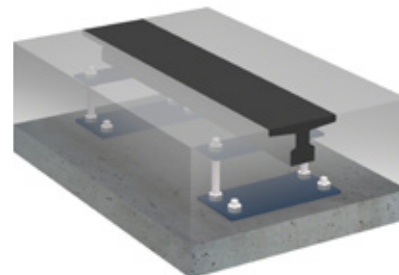
Movirack mobile racks

Movirack mobile racking has been installed in the two temperature controlled chambers. In total, they have a storage capacity of 4,620 pallets with a 1.1 t maximum weight each.

The racks rest on mobile bases that move both laterally and independently. To open the aisle where the required goods are housed, the operator gives the order by means of a remote control.

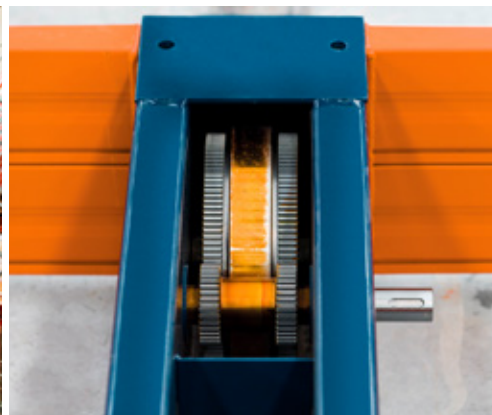


Guide rail

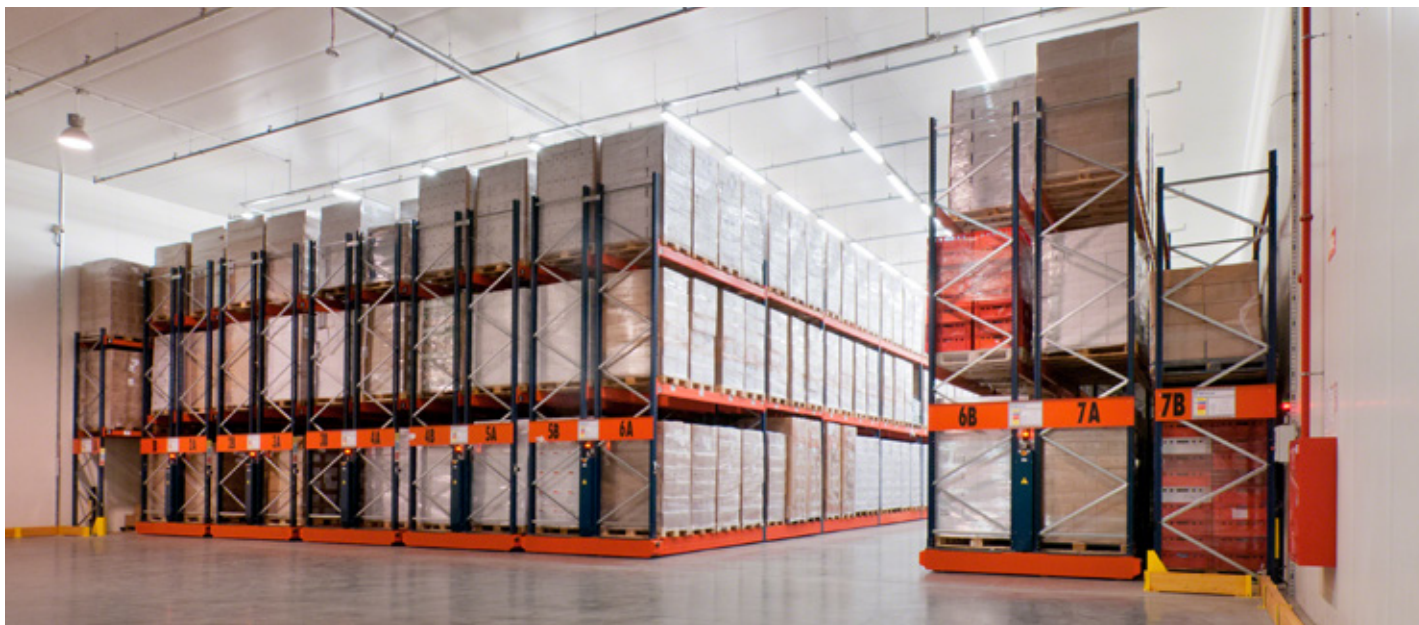


Roller track

The transmission of the power to the mobile bases is done via a double crown gear with double pinions, which provides better system performance and ensures the uniform movement of the racks



Gear with a double crown and pinion



Likewise, so the system operates well, the Movirack units incorporate safety devices, such as external and internal barriers with photocells, which stop all activity when operators work inside the aisle. There are also emergency stop buttons that, when triggered by an incident, interrupt the movement of the racks.



The two blocks of Movirack mobile racks have a control cabinet and an onboard cabinet on each of the racks. The PLC is located in the control cabinet, responsible for directing and processing movement commands.





Advantages for JAS-FBG S.A.

- **Maximum storage capacity:** the JAS-FBG S.A. warehouse can store 10,820 pallets.
- **Efficient management:** the selective pallet racking and the Movirack mobile racks help classify the merchandise according to the customer they belong to, their dimensions and turnover.
- **High throughput:** the storage systems installed by Mecalux offer direct access to the goods, which grants greater speed when managing product and controlling stock.



Technical data

Movirack mobile racking

Storage capacity	4,620 pallets
Pallet size	32" x 48"
Max. pallet weight	1.1 t
Rack height	18'
No. of mobile racks	13

Selective pallet racking

Storage capacity	4,800 pallets
Pallet size	32" x 48"
Max. pallet weight	1.1 t
Rack height	29'