

Case study: Trazcarnes

New frozen storage chamber of Trazcarnes features Movirack mobile racks

Location: Portugal





The Trazcarnes frozen storage installation is equipped with Movirack mobile racks by Mecalux, which uses the warehouse surface to the fullest. The result is greater storage capacity, while providing direct access to the SKUs when a work aisle is opened.

About Trazcarnes

Trazcarnes started out in 2000 in the town of Palmela, near Lisbon. It offers refrigerated storage and transport services, especially in the meat sector, to the main supply chains in Portugal. Among its immediate objectives is the expansion of its market in Europe.

Needs and the solution

In 2009, the company moved to the Carrascas industrial park to strengthen its growth rate and serve its customers faster. Recently, it asked Mecalux for a solution to achieve greater storage capacity, one that would optimise operations at the same time in its new frozen storage chambers.



After analysing the company's requirements, Mecalux equipped the new chamber with five double-depth racks on Movirack mobile bases and two stationary ones that are 8.8 m high and 34 m long. Overall, a storage capacity of 1,280 pallets with a maximum weight of 1,000 kg each has been obtained.





Movirack mobile pallet racking

This high-density system eliminates aisles, enabling only those that are essential. One of its biggest advantages is the considerable increase in storage volume, maxing out the available space, without losing direct access to the products.

Movirack units are suitable for Trazcarnes' frozen storage (that work at a temperature of -20 °C), as they reduce energy consumption due to the optimal distribution of chilled air between the pallets.

With the parking option, which distributes aisle space at equal distances, the system achieves better air circulation.

Racks rest on mobile bases that move laterally and autonomously. To open the required aisle and to extract or deposit the goods, the operator gives the order using a remote-control device.



A safe system

The system is equipped with moving elements, electronic equipment and several safety devices to protect the operators and stored merchandise:

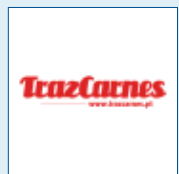
- External sensors bring everything to a full stop when a piece of equipment enters the interior of the aisle.
- Internal sensors detect the presence of objects in the aisle that could prevent the system from operating properly.
- Emergency stop buttons block the racks from moving if an incident occurs.
- Proximity photocells guarantee a safe and smooth stop.





Advantages for Trazcarnes

- **Large storage capacity:** the available surface is completely utilised to obtain a storage capacity for 1,280 pallets.
- **Optimum management of stock:** direct access to the pallets speeds up storage tasks and facilitates control over inventory.
- **Cost savings:** Movirack units help to significantly reduce energy consumption when generating cold conditions.



Technical data

Storage capacity	1,280 pallets
Pallet sizes	800/1,000 x 1,200 mm
Max. pallet weight	1,000 kg
Warehouse height	8.8 m
Warehouse length	34 m
No. of mobile racks	5
Working temperature	-20°C

