



Case study: El Encinar de Humienta

Pallet Shuttle for the largest beef producer in Spain

Location: Spain



In recent years, the meat company called El Encinar de Humienta has made an extensive investment aimed at improving its infrastructures and processes. For this reason, it has opened a new 1,000 m² freezer space that Mecalux has equipped with the semi-automatic Pallet Shuttle system. There it deposits 1,997 pallets with finished products, ready to be distributed to its customers in Spain, Europe and Asia.

About El Encinar de Humienta

Founded in 1998, El Encinar de Humienta is the number one company in beef production in Spain. The company's headquarters are in the Central Meat Market (Madrid), although its 12,000 m² production plant is 200 km away, specifically in the municipality of Almaraz (western Spain).

The production centre has the most cutting-edge technology to run its business according to the strictest certifications. About 70% of its production volume is sold in Spain and the rest is exported mainly to Europe (Germany, Italy, Portugal and the Netherlands), Africa and Asia.



The meat company can store and manage the 100 SKUs in its catalogue in a total of 256 storage slots





Jaime Yartu San Millán
Managing Director at El Encinar de Humienta

“The new frozen storage installation represents a time of consolidation for our business, after a period of growth and many investments. So, we entrusted Mecalux with this project because of their sound track record.”

New freezer stores

Since its beginnings, El Encinar de Humienta has been committed to selling high-quality meats at a competitive price through an efficient, on-time service that satisfies its clientele. To this end, the company continues to be firmly committed to R&D and has boosted the inclusion of new technologies in all its processes, including logistics.

“To improve our supply chain, we needed to increase our facility's storage capacity. Previously, we used to freeze and store finished products in other facilities,” explains Jaime Yartu, Managing Director at El Encinar de Humienta. However, this solution made it difficult to manage the goods and entailed an added logistics cost.

To deal with this situation, the company has set up a new freezer installation (working at -25 °C), next to its production centre in Almaraz. It is allocated to finished products, ready to be distributed to their customers in Spain and abroad.

Over a 1,000 m² surface area, the chamber consists of two 9-metre high, compact pallet racking blocks with the semi-automatic Pallet Shuttle system. *“We chose this solution because it provides us with the maximum possible storage capacity,”* emphasises Yartu.

The racks are deep enough to hold between 8 and 9 pallets in each channel, bringing the total storage capacity to 1,997 pallets. The compaction systems

are especially suitable for frozen storage installations –such as El Encinar de Humienta’s– as they mean significant power savings for generating cold, since this cold is distributed around a larger number of stored pallets.

Furthermore, among compact systems, the Pallet Shuttle is the one that speeds up the entry and exit of goods. This chamber receives about 70 pallets a day and distributes another 70 pallets. The installation has two motorised shuttles that run inside the storage channels inserting or removing the pallets from their corresponding locations.

The operation is straightforward: using reach trucks, the operators place the Pallet Shuttle in the appropriate channel and load the pallets in the first position on the racks. The motorised shuttle then moves them directly to the deepest location within the channel autonomously. The reverse operation is performed to extract the goods.

Operators use Wi-Fi connected tablets to issue orders to the shuttle. Using the tablet, they can select how many pallets to extract, count inventory and also organise users and authorised personnel.



Advantages for El Encinar de Humienta

- **Storage capacity:** the freezer store is equipped with two compact blocks of racks with the Pallet Shuttle system that holds 1,997 pallets.
- **Cost reduction:** the compact system uses the entire surface area, thus reducing energy consumption to generate cool air significantly.
- **Maximum productivity:** the Pallet Shuttle system minimises handling by operators, which translates into higher warehousing productivity.



Technical data

Storage capacity	1,997 pallets
Pallet size	1,000 x 1,200 mm
Max. pallet weight	1,100 kg
Racking height	9 m
Racking length	43 m
Racking depth	8 m and 10 m
No. of automatic shuttles	2

