

## Case study: Aceites Toledo

A bottled olive oil warehouse with the semi-automated Pallet Shuttle system

Location: Spain



Mecalux has set up two blocks of racks that run with the semi-automatic Pallet Shuttle system in Aceites Toledo's distribution centre. This solution, designed especially to store bottled product, provides a storage capacity for 1,880 pallets and streamlines incoming and outgoing goods from the respective channels.



### About Aceites Toledo

Established in 1956 by entrepreneur Juan Rubio, Aceites Toledo is a Spanish firm that produces and sells different varieties and classes of olive oils. All products meet strict quality controls to guarantee excellent taste and texture.

The company calls Montes de Toledo home, a region known for producing large quantities of extra-virgin olive oil. Aceites Toledo stands out for the quality of its products and for taking a traditional yet innovative approach to all its production processes.



Recently, the company reorganised its warehouse's distribution in Los Yébenes (Toledo) to deal with the rising sales achieved over the last few years.

A peak productivity storage system would give it the best capacity to house finished products, as well as swift inputs and outputs.

### Semi-automated Pallet Shuttle

Mecalux went ahead and erected two, 9.5 m high blocks of racks that operate with the semi-automatic Pallet Shuttle system, one placed in front of the other. One block is 40 m long and 13 m deep, while the other is 9 m long and 12 m deep.

The Pallet Shuttle is a high-density system designed to store many pallets of each SKU. Every bit of available space is fully used to top out storage capacity. Moreover, its operational usage is simple, fast and requires little to no action by operators, leading to a constant inflow and outflow of products.

The operators place the motorised shuttle into the right channel, deposit the pallets in the first position of the racks, and then the Pallet Shuttle autonomously transfers these directly to the first free location. The reverse operation is performed to remove the goods.

The automatic shuttle is what executes the movements inside the rack channels, without the forklifts needing to drive into the storage lanes, which speeds up pallet insertion and extraction.



### The high-density Pallet Shuttle system at Aceites Toledo holds more than 1,880 pallets allocated throughout 136 storage channels







### Control tablet

The warehouse has Wi-Fi connected tablets that are used to send orders to the Pallet Shuttles. Each tablet can interact with all the warehouse shuttles, fulfilling a prioritisation protocol.

These tablets carry out different apps and functions, such as the number of pallets that will be worked with, taking inventory and managing users and authorised personnel, etc.

### Battery charging

Batteries extracted from the shuttles are connected by merely fitting them into the charging stations. The warehouse is supplied with spares to switch out the shuttle battery while the Pallet Shuttle is still inside the storage channel, avoiding stops in service.

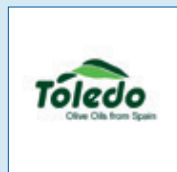






### Advantages for Aceites Toledo

- **Storage capacity:** in a total of 136 channels, the warehouse obtains a storage capacity for 1,880 pallets.
- **More productive:** the semi-automatic Pallet Shuttle system eases the insertion and extraction of pallets in the channels.
- **Safety guaranteed:** both the Pallet Shuttle and the warehouse racks have safety devices to protect the structure, the goods and the workers to the fullest.



### Technical data

Storage capacity	1,880 pallets
Pallet sizes	800/1,000 x 1,200 mm
Max. pallet weight	1,000 kg
Racking height	9.5 m

