



Case Study: Domaines Paul MasQuality wines: prime storage and conservation conditions



Mecalux reorganises the warehouse of the wine producer Domaines Paul Mas, divides it into three sectors and installs different storage solutions that fit the characteristics and operation of each product. Automation arrives in the form of the racking served by shuttles controlled by a Wi-Fi tablet and an automated vertical warehouse.



Domaines Paul Mas: their needs

Created in the year 2000 by Jean-Claude Mas Montagnac (Hérault), the company has become, in just a single decade, one of the most reputable businesses in the wine industry in Southern France.

Due to of its relentless growth, the company had to increase storage capacity but encountered the problem of not being able to extend the surface of the warehouse. The only possible solution was to optimise the available space and, at the same time, automate those logistics processes that would enable improved profitability of the installation. This is exactly why Domaines Paul Mas put their trust in Mecalux for this project.

The solution

After analysing the needs of Domaines Paul Mas, they opted to divide the logistics centre into three areas and install various storage solutions in each of them, taking into account the characteristics of each product and its operations. In the reserved stock sector for dry materials (corks, foils, cardboard boxes, etc.) they have installed three storage systems. At one end there is a mezzanine floor of two levels and, opposite, three aisles have been enabled with single-deep pallet racking. Here, picking takes place directly at the lower levels, depositing reserve pallets at higher levels. In addition, it also has a 7.25 m high automated vertical warehouse with 36 trays for the labels and back labels of the bottles.

In the second and third cell of the Domaines Paul Mas warehouse, finished products from the bottling line are housed. To store a large number of pallets of the same SKU, they have erected high-density pallet racking served by shuttles. The two areas are connected by double doors that allow the passage of forklifts.

Also in cell 2 there are five aisles of single-deep pallet racking. The two loading docks run both the reception of the incoming goods from the outside, and outgoing orders for customers.

More than 3,000 pallets of 800 x 1,200 mm divided into three zones are housed in the Domaines Paul Mas warehouse







Pallet Shuttle: automated storage

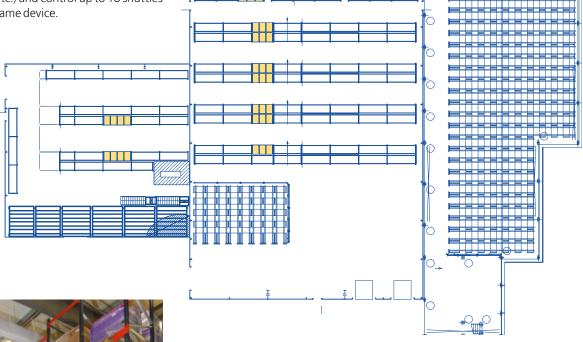
The automation offered by the Pallet Shuttle system enables operators to simply bring pallets to the channel input and change the shuttle position when necessary.

Its operation is very simple: with the already loaded pallet, the automatic shuttle moves to the first free location, where it will deposit the load. While the shuttle transfers and deposits the pallet, the operator uses the time to place another pallet in the first position of the same channel. Thus, when the shuttle returns to the front of the lane it can repeat the same movement.

Shuttle movements within the racks are performed automatically, following the instructions the operator sends it via a Wi-Fi connected tablet. Through a user-friendly interface, personnel can carry out advanced functions (selecting pallets, inventory, continuous loading and unloading, etc.) and control up to 18 shuttles with the same device.



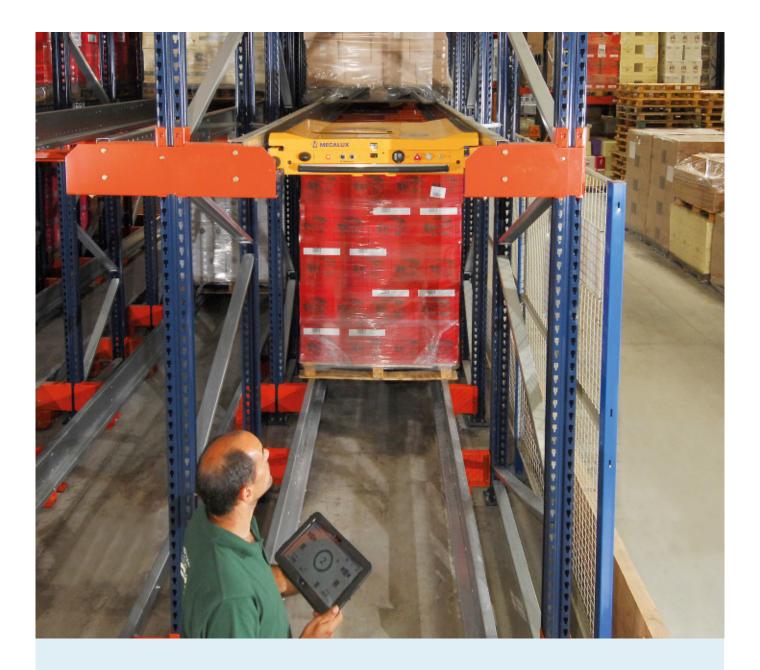
In addition, Mecalux offers the possibility of installing a positioning camera in the shuttle for the operator to view from the same tablet where and what the shuttle is doing at all times. Once the shuttle's battery runs out, the shuttle is automatically sent to the front of the channel, and the control tablet immediately notifies the operator that the battery is depleted. That is when it is moved to the battery charging station, set up to charge two shuttles at once.



The Pallet Shuttle system permits faster handling of goods thanks to the automatic loading and unloading of pallets







Advantages for Domaines Paul Mas

- **Maximum capacity in a small space:** the Domaines Paul Mas warehouse has a total storage capacity of 3,032 pallets of 800 x 1,200 mm divided into three zones.
- **Increased productivity:** the various solutions installed multiply pallet input and output operations, as well as order picking.
- **Better occupational safety:** automated systems are conducive to a marked improvement in working conditions.



Technical data

Storage capacity	3,032 pallets
Pallet size	800 x 1,200 mm 1,000 x 1,200 mm
Max. pallet weight	1,000 kg
Racking height	8.5 m
No. of shuttles	2



