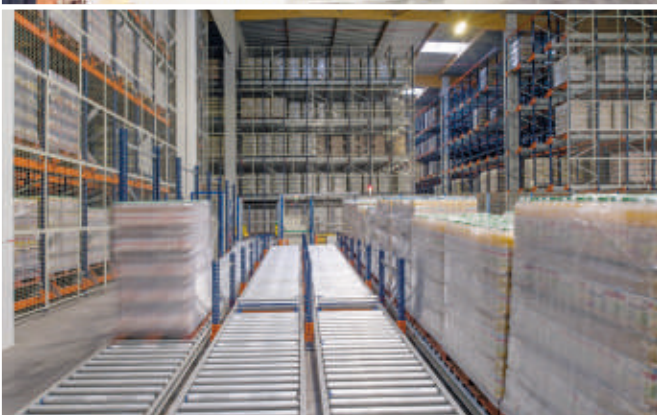




Case study: Grupo Alainé

Deep, active channels

Location: France



Grupo Alainé has expanded its Mâcon installations (in France) to accommodate the new production line of one of its customers. To do so, Mecalux has equipped an 8,000 m² floor area with the semi-automatic Pallet Shuttle system that offers a total 20,397-pallet storage capacity. This solution is ideal for housing large volumes of pallets per SKU in channels that run up to 43 m in depth, as well as for managing the loading and unloading of 2,500 pallets a day.



From production to customer

Founded in 1945 in the town of Mâcon (France), Grupo Alainé is a well-known logistics operator in France that owns and operates more than 350,000 m² of warehousing space. It supports all types of businesses with effective solutions, despite the industrial sector, such as cosmetics, food and beverage, construction and e-commerce.

Throughout the years, Grupo Alainé has expanded its sales network and, currently, operates in more than twenty coun-

tries. Besides France, it has offices in Luxembourg, Portugal, the Netherlands, Belgium, Germany, Slovakia, Poland and the United Kingdom. The company's objective is to be as close as possible to its customers so that it can iron out order details as soon as possible, regardless of the deadline, destination or product type.

Part of its success is due to its commitment to customer service and its sense of entrepreneurship. As a result, its sales have kept growing in parallel with the demand level it is experiencing. Recently, the company

has opened a new warehouse in Mâcon. It involves an expansion of its old distribution centre; before it had 21,000 m² and, now, it has added 8,000 m² more warehousing area.

This space has been allocated to housing products from a popular juice maker. According to Jérôme Ezcurra, operational manager of Grupo Alainé, *"we had to support our customer's growing business, so we set up a new production line. As a consequence, we had to increase our storage capacity."*



Jérôme Ezcurra
Operations manager at Grupo Alainé

"Mecalux is a long-time partner of Grupo Alainé. The technical team understood the logistics needs we put forward and it found a solution that would help us strengthen our growth potential."

Top space usage by the Pallet Shuttle system means Alainé saves on floor area costs and reaches a 20,397-pallet storage capacity

Advantages of the Pallet Shuttle system

Mecalux has equipped the new warehouse with 18 blocks of racks run by the Pallet Shuttle system. In the words of the operations manager, *“it is a tech-savvy solution, that will continue to do the job even as we grow.”*

Currently and after it was up and running a while, the company felt highly satisfied with the results provided by the installation. As Jérôme Ezcurra explains, *“the Pallet Shuttle system has brought many advantages to the table, like better utilisation of our storage surface, reduced movements by our operators and, finally, floor optimisation.”*

The racking is 11 m high, divided in five levels, and fills almost the entire warehouse’s surface to yield a higher storage capacity. Some of the blocks have up to 43 m deep channels, where 49 pallets can be housed. Thanks to this solution, Grupo Alainé can store 20,397 pallets in total, with a 950 kg maximum unit weight. The Pallet Shuttle system means SKUs can be grouped in each channel, instead of using an entire lane for the same SKU. This has had enormous benefits for Grupo Alainé by making it possible to diversify its warehouse and deposit more items.

Besides the storage capacity, Grupo Alainé has become more productive. The reason is that the automatic shuttle is the device in charge of inserting and extracting pallets from inside the channels automatically. Workers, operating reach trucks, must only place the Pallet Shuttle in the corresponding channel and set the pallets in the first slot of the racking. Thus, the opera-



tor’s movements are optimised because, in fact, the shuttle moves the load on its own up to the pallet’s set location.

Another advantage of including an automatic shuttle is that loading and unloading times are reduced, by eliminating operators moving inside the storage lanes. This is essential to store the more than 2,000 pallets that arrive on a daily basis from different points in Europe (mainly, France, Germany and Spain). Operators carry a handheld control tablet (with Wi-

Fi) to run the Pallet Shuttles remotely. The tablet’s monitor is highly-intuitive and requires no specialised training to use. Then, from the device, workers can execute numerous apps and functions like choosing how many pallets must be inserted or extracted or carrying out an inventory count.

“After using the Pallet Shuttle system for a while, we feel the installation is getting the job done, and we are happy with how the whole setup is running,” said the operations director.

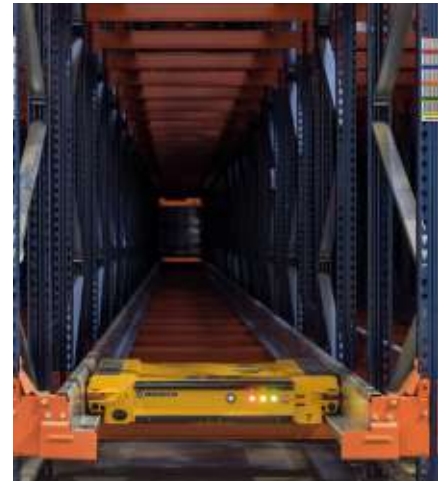


Storage channel depth

All pallets flowing into the channel must be added together to calculate the channel's depth, plus the span between the unit loads and the clearance gaps needed to insert the automatic shuttle.

The dimensions of the channels and, as such, the racks are subject to different factors:

- Available in-warehouse surface area.
- Number of pallet that must be stored.
- Product rotation. The channels' depth must guarantee the pace of product inputs and outputs the company needs.

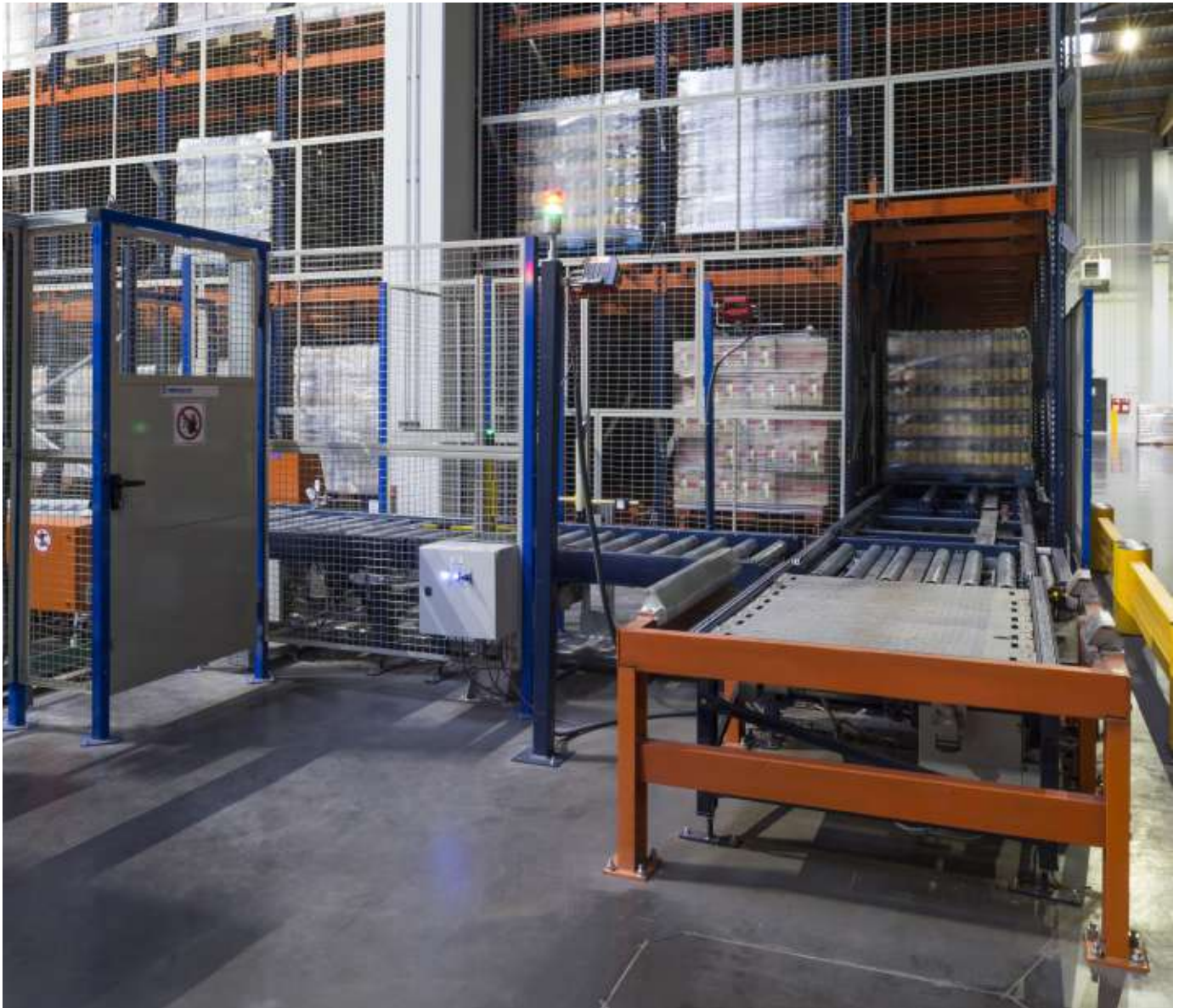


Complete preloading zone

Two preloading zones were set up since this is a very large-sized warehouse. There, pallets from the same order or route are grouped together on the floor, expediting the subsequent loading of transport vehicles.

These zones include a transfer car, tasked with distributing pallets to the live channel, which are deep enough to hold 11 pallets each. Roller channels are slightly inclined so that pallets slide via gravity from the highest to the lowest point, which faces the docks. The rollers have a split setup at the exit point, meaning pallet trucks can slip their forks in to extract the pallets.





Advantages for Grupo Alainé

- **Bigger storage capacity:** by expanding its warehouse, Grupo Alainé has increased its storage capacity, housing 20,397 pallets in up to 43 m deep channels.
- **Better productivity:** the Pallet Shuttle system ensures the slotting and retrieval of 2,500 pallets from the racks daily.
- **Operational speeds:** the automation of the Pallet Shuttle system and the conveyors speed up all in-warehouse operations, a vital step forward in supplying Grupo Alainé's customers as quickly as possible.



Technical data

Storage capacity	20,397 pallets
Pallet size	800 x 1,200 mm
Max. pallet weight	950 kg
Racking height	11 m
Max. channel depth	43 m
No. of shuttles	10

