



Case study: Les Mille Et Une Feuilles Puff-pastry management at optimal speeds

Location: France



Les Mille Et Une Feuilles, which is a French puff-pastry maker (thus, the name 'a Thousand and One Leaves' in English), has opened a new warehouse with high-density racking and the Mecalux Pallet Shuttle system. This installation serves a dual purpose: to send raw materials to production and to store finished products. The Pallet Shuttle, being a semi-automatic solution, provides very fast inputs and outputs of the products.

About Les Mille Et Une Feuilles

It is a family-owned French company with more than 30 years of experience dedicated to the manufacture and marketing of puff-pastries. These pastries, originating in Tunisia and Morocco, are made with durum wheat meal, water and salt, which are filled with ingredients, both salty and sweet, although the most common is ham, Gruyere cheese and egg, and then fried.

Its puff-pastries are among the finest sold on the market, the result of a specific kneading processes. This guarantees flexibility and convenience in use. In addition to France, Les Mille Et Une Feuilles is present in countries such as Spain, England, Italy, Belgium and Germany.

The Pallet Shuttle system is ideal for handling a large volume of pallets per SKU, as well as high paced loading and unloading activity

The installations

Les Mille Et Une Feuilles has its modern facilities in the town of Gonesse (a few kilometres from Paris). For this company, innovation and quality go hand in hand. It constantly strives to improve all its processes to raise product quality and, ultimately, satisfy its consumers.

Automation is the best solution for the high pace work that Les Mille Et Une Feuilles must face on a daily basis. It currently has twenty fully automatic production lines and produces more than 75,000 products/day, i.e. more than 20 million pastries per year.

Recently, it built a new warehouse next to its production centre. Good communication between the two facilities is essential for the company, because the warehouse has two very well-defined functions: on the one hand, to store finished products ready for distribution and, on the other, to send the raw materials needed for the day's production.

"We wanted to optimise the volume of this facility with the aim of increasing the number of stored SKUs," explains Dan Bellaiche, director of Les Mille Et



Dan Bellaiche Director of Les Mille Et Une Feuilles

"Mecalux is a renowned storage solutions company, so it was considered the best partner to find the solution we needed. The sales rep was excellent because they gave us good advice from the start and presented us with a multitude of possibilities. In addition, they carried out a very thorough follow-up of the project's implementation. In short, we are very satisfied with this joint endeavour."

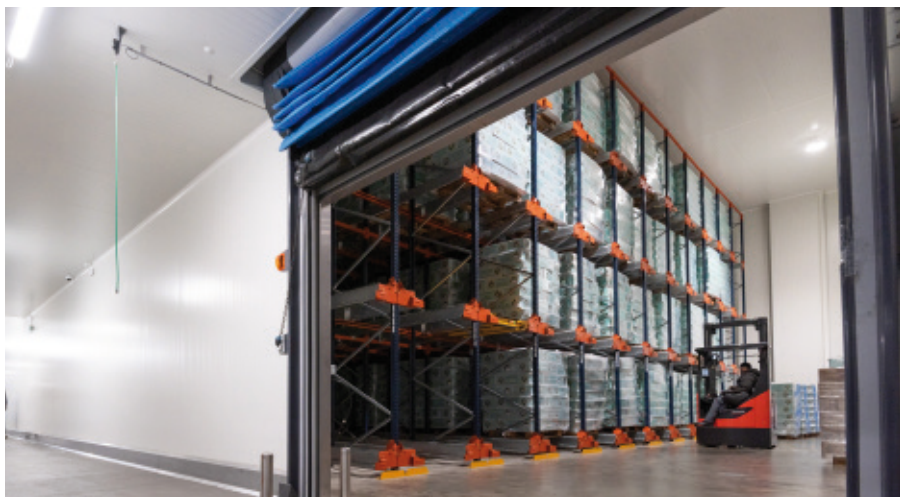
Une Feuilles. The company approached Mecalux when it came to equipping the warehouse. Of course, Les Mille Et Une Feuilles' priority was to automate storage tasks as much as possible to make arrivals and departures of the goods more fluid.

Advantages of the Pallet Shuttle system

The warehouse contains two chambers. One works at room temperature and the raw materials to be sent to production are deposited there. The other operates at a controlled temperature of 2 °C and is meant for finished products. In both, Mecalux in-

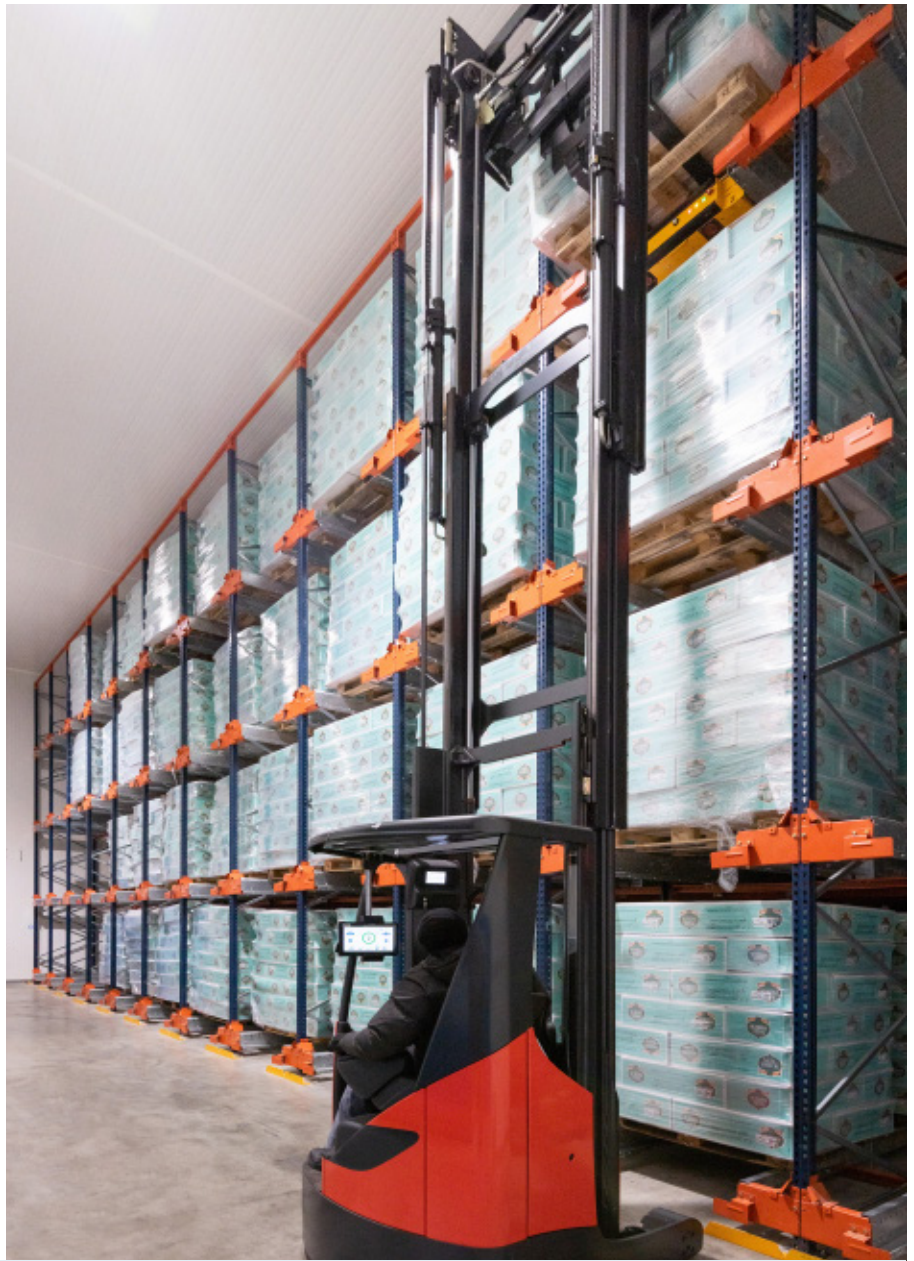
stalled high-density pallet racks served by Pallet Shuttles. The racks are 8.5 m high and comprise lanes with support rails on each side on which the Pallet Shuttle runs and, at the same time, where the pallets are stored.

It is a semi-automatic compact storage system that takes advantage of all the available surface to get more storage capacity. All in all, Les Mille Et Une Feuilles has room for 1,425 pallets. Operators only have to approach the infeed channels to insert and remove pallets, as well as change the shuttle's position, when necessary.



“The Pallet Shuttle’s operation stands out for its simplicity,” says Dan Bellaiche. The automatic shuttle moves the load to the first vacant position within the channel. While the Pallet Shuttle moves and deposits the pallet, the operator places another pallet in the first position of the same channel. That way, when the Pallet Shuttle returns to the front of the lane, it can repeat the same movement successively.

Operators control the Pallet Shuttle via a WIFI connected tablet. These devices have a very intuitive user interface and, through it, different functions can be carried out such as selecting the number of pallets to be inserted or extracted, taking inventory, etc.



Advantages for Les Mille Et Une Feuilles

- **Surface exploitation:** the racking blocks occupy almost the entire surface area of the two storage chambers and provide capacity for 1,425 pallets.
- **Streamlined operations:** the Pallet Shuttle is a semi-automatic system that makes the inflows and outflows of goods extremely fast, which is essential for Les Mille Et Une Feuilles.



Technical data

Storage capacity	1,425 pallets
Pallet size	800 x 1,200 mm
Max. pallet weight	1,060 kg
Racking height	8.5 m

