



Case study: Mexicana de Industrias y Marcas
MIYM's warehouse: operational agility that looks ahead

Location: Mexico





Mecalux has supplied Mexicana de Industrias y Marcas (MIYM), producer of Delite and Tivoli milks, a block of live pallet racking adapted to the size of pallets used in the warehouse.

This system ensures the perfect turnover of goods, maximum storage capacity and streamlines the movements of operators. The installation is ready for future growth.

A company in constant growth

Mexicana de Industrias y Marcas (MIYM) is a company specialised in the production and packaging of dairy products. Founded in 2007 in the Mexican state of Puebla, its philosophy underscores continuous improvement and the introduction of technology into all its productive processes. This has allowed it to grow and increase sales in recent years.

In 2010, the company launched its first trademark, Delite, producing a variety of partially skimmed milk products. A year later, MIYM decided to commercialise its second brand, Tivoli, aiming to boost its production levels and strengthen its expansion in the Mexican market.

Needs of MIYM

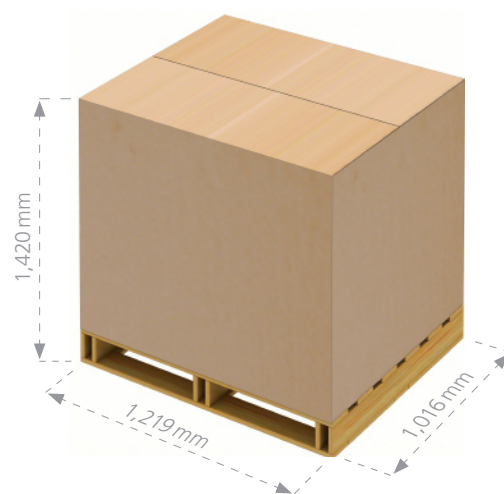
The company built a new production plant and a warehouse in Huejotzingo (in the state of Puebla). They required a storage system for its Delite brand products to optimise the available area, offer great capacity and, in turn, facilitate access to load units.

MIYM uses a pallet manufactured specifically to meet its logistical needs. These load units are 1,219 x 1,016 x 1,420 mm in size, with a maximum weight of 1,200 kg. For that reason, the racking composition had to be adjusted to these characteristics.

The company requested the collaboration of Mecalux to find the ideal solution for the storage and handling of goods. Its aspiration was an installation with sufficient capacity for all its current production, with agile operations and all the while anticipating growth expectations.

Solution by Mecalux

Mecalux provided a block of live pallet racking consisting of 56, 23.4 m deep channels that can deep store 22 pallets, each with four levels that are 7 m high. In future enlargements, according to the evolution of the market and the needs of the company, more equivalent blocks will be added to those recently installed.





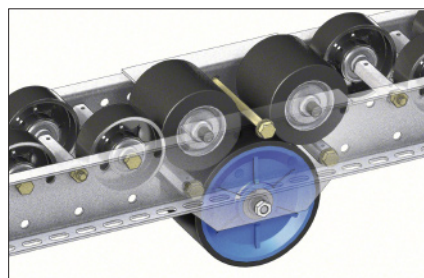
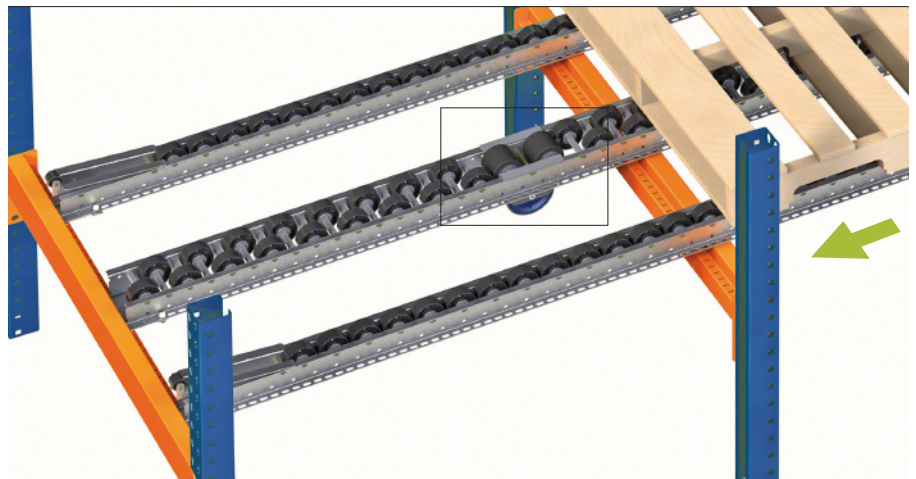
Live pallet racking

The racks consist of slightly sloped channels that facilitate the proper gravity flow of the pallets. The channels are adapted to sizes and characteristics of the load units that MIYM uses: channels consist of two sets of single wheels (or rollers) on each side and a double set in the centre.

The speed at which the pallets move along the wheels (or rollers) is controlled via direct action brake drums located in the central set. These devices act upon the two adjoining, polyurethane encased rollers, guaranteeing greater contact between them and the pallets.

This system allows homogeneous displacement of loads without acceleration. The ramp at the end of the route stops the pallets progressively.

These racks ensure the perfect turnover of goods, applying the FIFO method (first-in, first-out), i.e. the first pallet in is the first out. The pallets are introduced into the highest part of the track in the load aisle.



Close up of the brake drums

Then, they move autonomously to the opposite end and are ready to be extracted.

The movements of the operators are reduced. They must only deposit and withdraw the pallets from their corresponding locations using front-loading forklifts. In addition, the distances to be travelled are minimal by having all the SKUs in the same access aisle.





Advantages for MIYM

- **Massive storage capacity:** in just 477 m², greater storage capacity for the 1,200 pallets is achieved.
- **Greater agility:** the live pallet racks ensure that the loading and unloading of products is carried out with the utmost speed and without interference.
- **Future growth:** the warehouse is ready to grow according to MIYM's needs and pace of expansion.



Technical data

Storage capacity	1,232 pallets
Pallet size	1,219 x 1,016 x 1,420 mm
Maximum pallet weight	1,200 kg
No. of levels high	4
No. of channels	56
Racking height	7 m
Racking length	20.4 m

