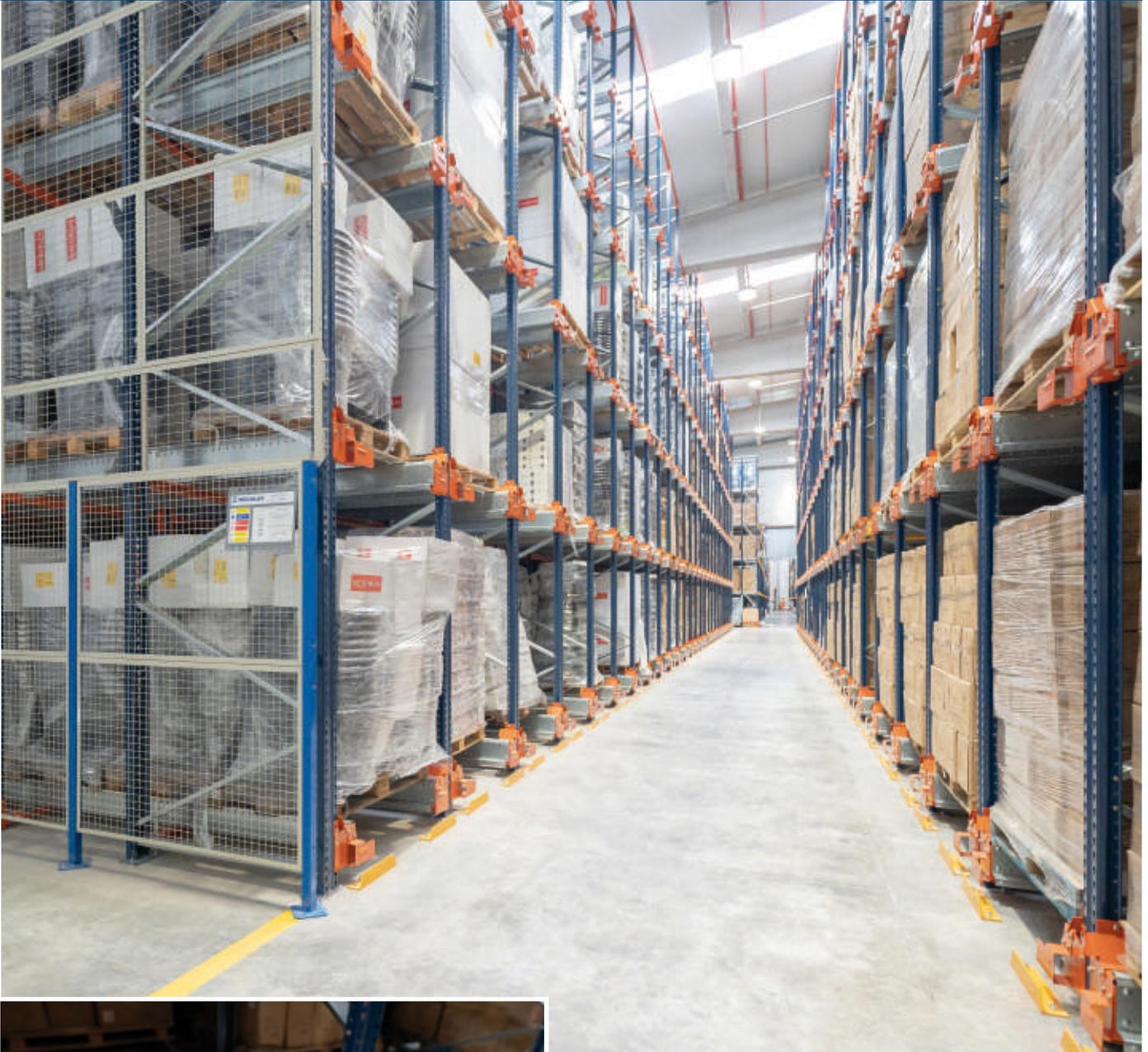


Case study: Plásticos Vidal

Pound shop wholesaler gets picking solution

Location: Spain



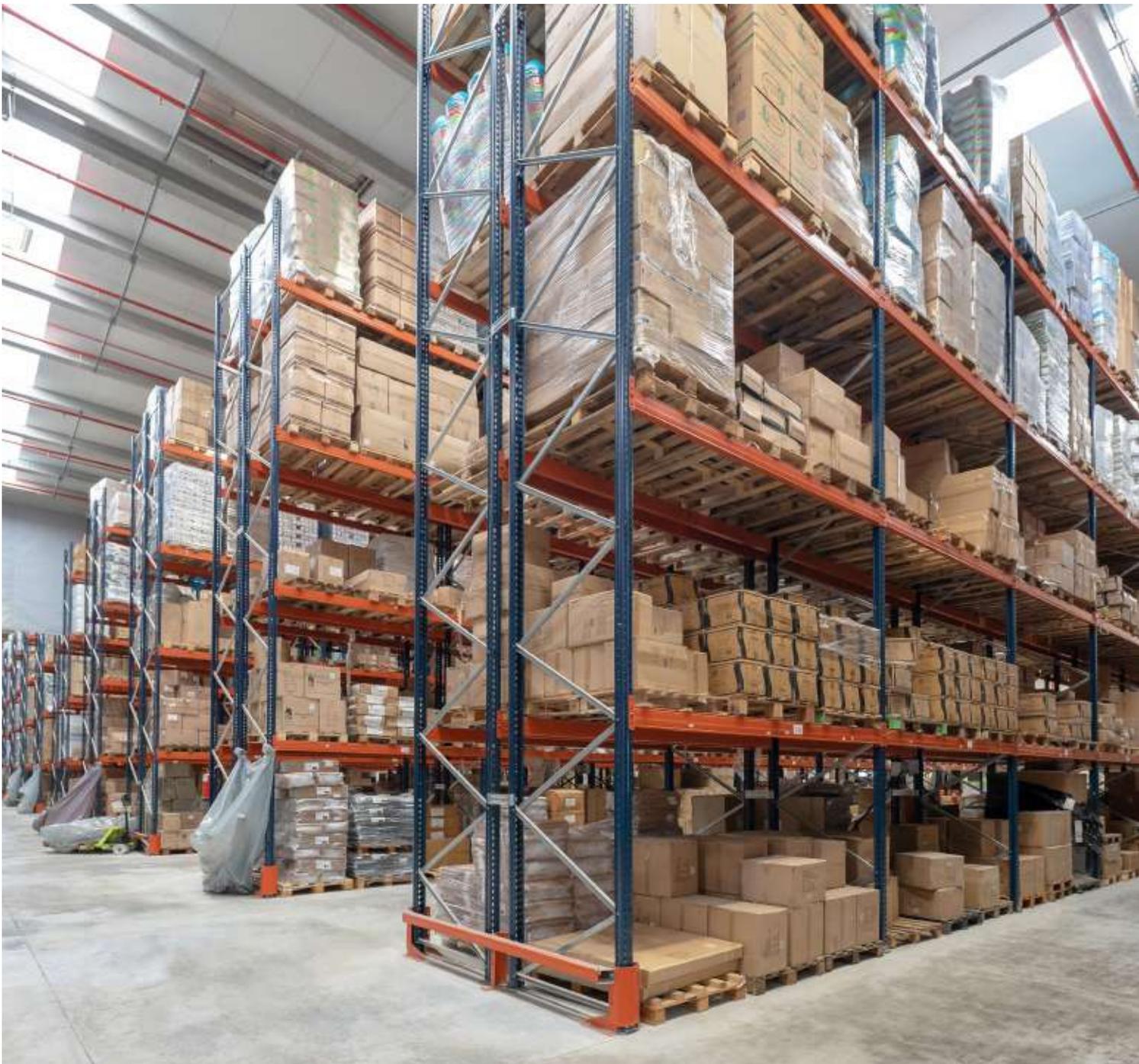
Plásticos Vidal, one of the most well-known Spanish companies in the pound shop sector, operates a warehouse in the Valencian town of Olleria that stands out for its huge size (18,700 m²). Mecalux has equipped it with four storage solutions designed to manage the company's more than 5,000 SKUs: pallet racks, Longspan shelving for picking, drive-in racks and the semi-automatic Pallet Shuttle system. In total, the storage capacity is 23,480 pallets large.



About Plásticos Vidal

Plásticos Vidal is a Spanish company that opened in 1999 in Ollería (Community of Valencia, Spain) and which focuses on selling to pound shop retailers. In the last few years, it has expanded its catalogue and started doing business internationally, being present in more than 20 countries.

Pound shops first appeared in Spain in the 30s, but it was not until the 80s that they became both popular and highly successful. Presently, all kinds of household knick-knacks are found in these variety bazaars, from cleaning products to very low-priced toys (from a dollar, a pound, a euro, etc.).



Sectored warehouse

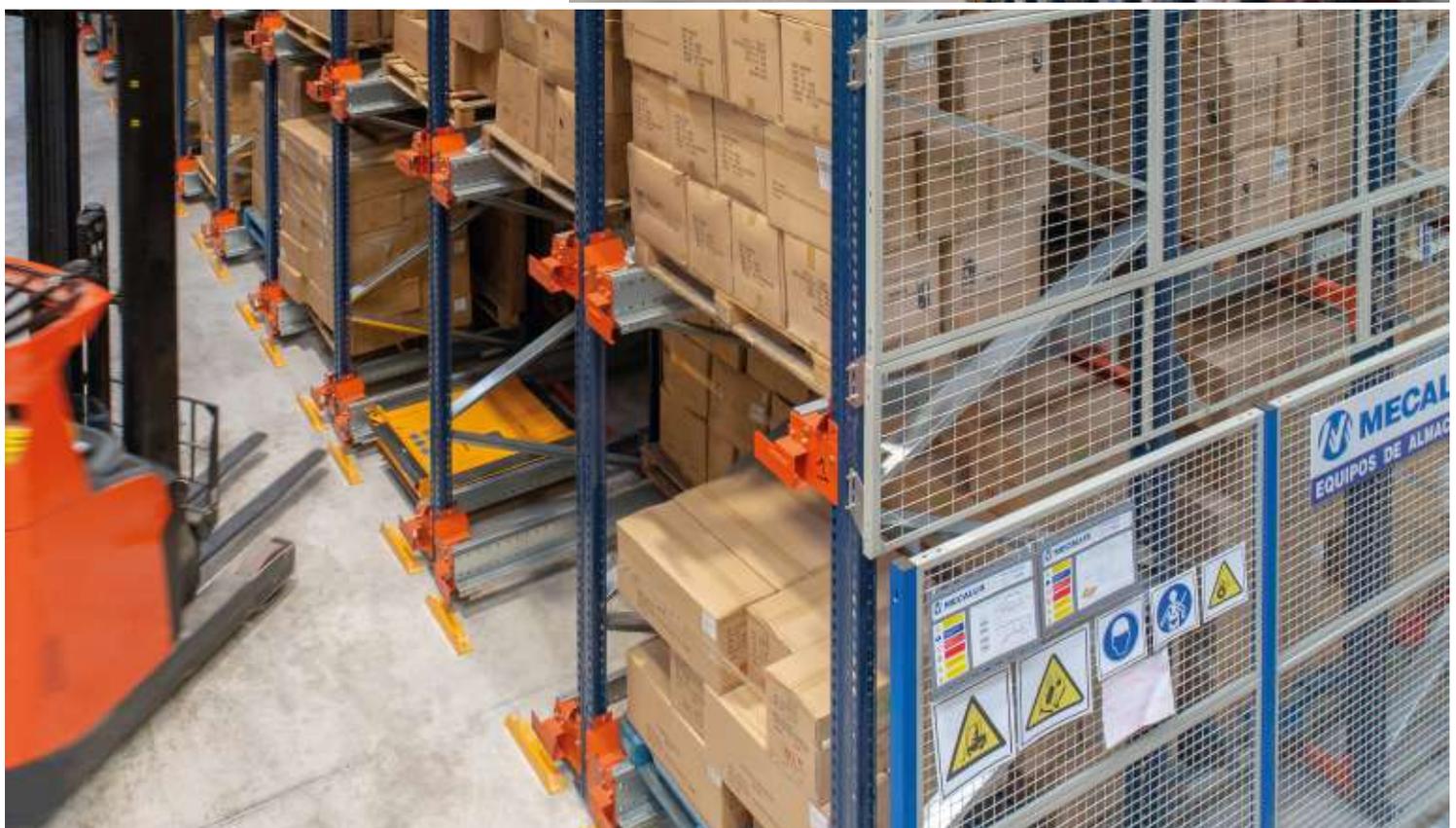
For its logistics centre, Plásticos Vidal needed storage capacity in order to house the more than 5,000 SKUs it works with, as well as a solution that would facilitate all operations, including order picking. Daily, they prepare an average of 100 orders (comprised of 200 order lines each) which they distribute throughout the world.

Recently, the company opened a new 18,700 m² logistics centre in Ollería sectored into five different zones. Each day between 200 and 400 pallets arrive at the warehouse from China with products that could be consumer goods or highly seasonal goods.

Sectorisation has helped sort this volume of pallets as per features, sizes and level of demand. Plus, it brought about better organisation of the work because operators have a few assigned zones where they prepare orders, thus increasing the centre's productivity.

Mecalux has equipped the logistics centre with four storage systems able to adapt to the huge variety of available products:

- Pallet racking
- Picking shelves
- Drive-in pallet racking
- Racks with the Pallet Shuttle system





Pallet racking

All the areas of the warehouse have blocks of pallet racks. This is due to the fact that this system is highly versatile, since the racks can include components that adjust the sizes of the locations to the pallets.

These items are picked directly off the pallets located on lower levels of the racks. Reserve products are set in the upper ones, so goods are always in place to prevent any sort of interruption due to stockouts.

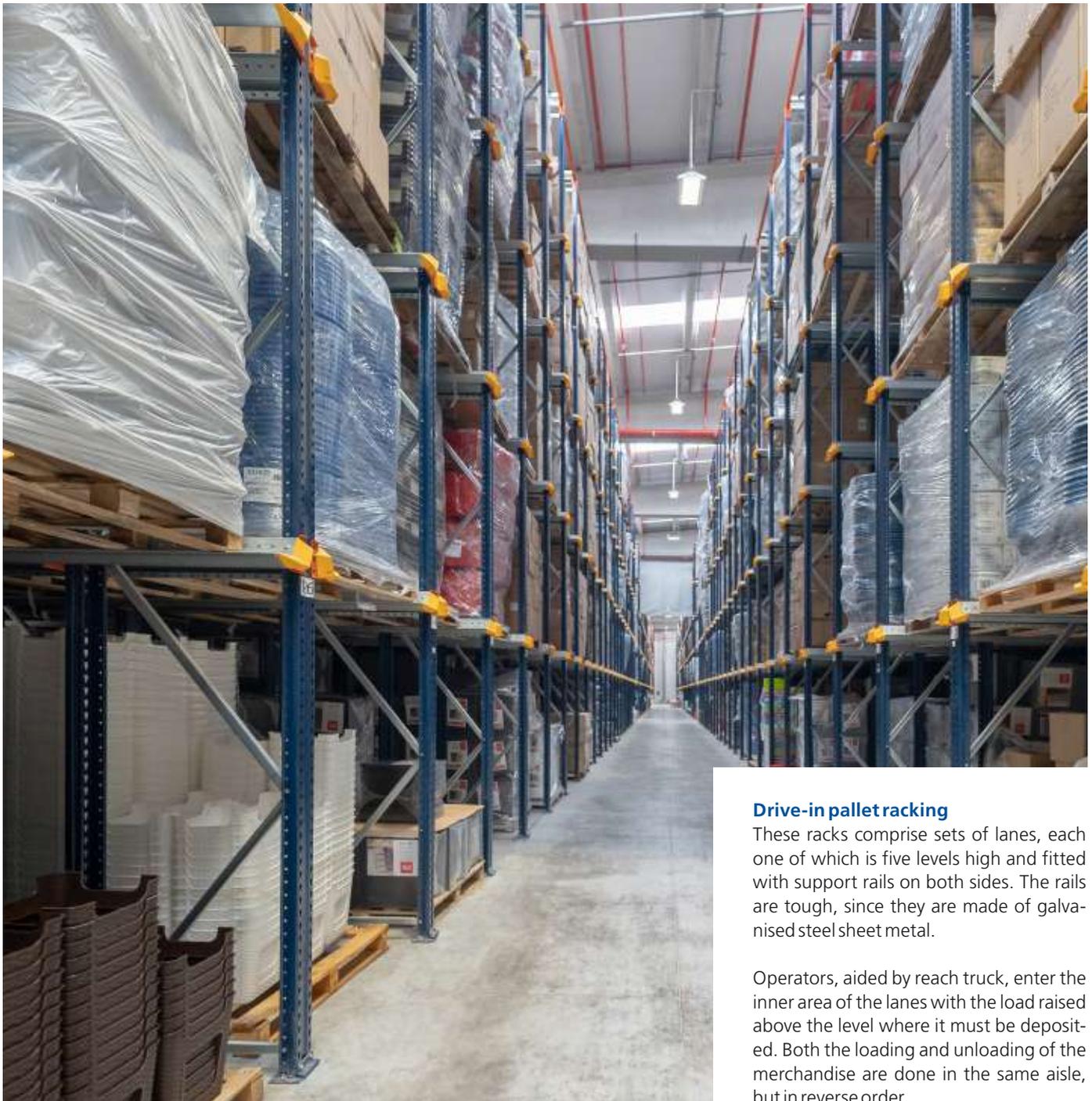
The pallet racking of the Plásticos Vidal logistics centre offers storage capacity for 13,695 pallets



Picking shelves

In one of the warehousing areas, they installed 3 m high picking shelf units. These structures are heavy-duty and provide direct access to products, which helps the quick insertion and extraction of the goods from their locations.

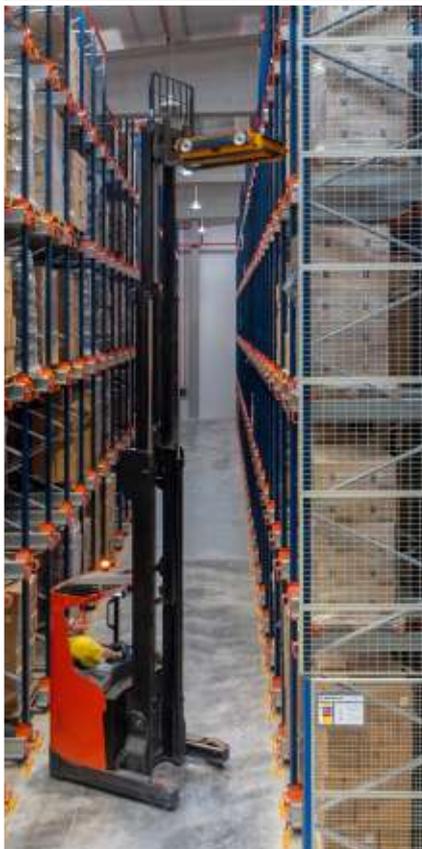
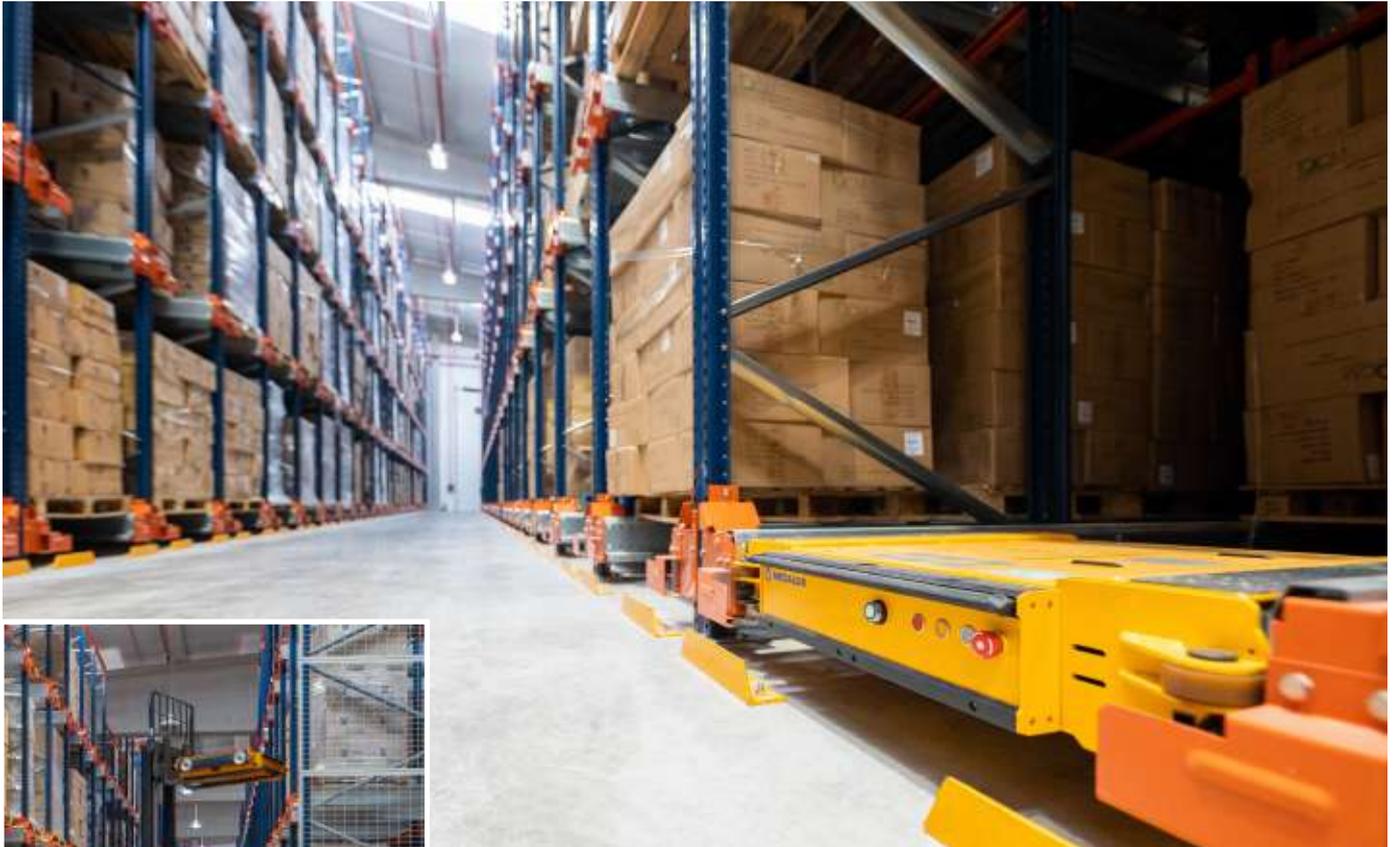
Operators crisscross the warehouse following the instructions sent to their handheld RF devices, which are used to locate the SKUs for each order. Once the order is finished, it is taken to the consolidation area where it is verified for correctness, packaged up, labelled and any needed documentation printed for its distribution.



Drive-in pallet racking

These racks comprise sets of lanes, each one of which is five levels high and fitted with support rails on both sides. The rails are tough, since they are made of galvanised steel sheet metal.

Operators, aided by reach truck, enter the inner area of the lanes with the load raised above the level where it must be deposited. Both the loading and unloading of the merchandise are done in the same aisle, but in reverse order.



Pallet Shuttle system

Mecalux has installed three blocks of 11 m high drive-in pallet racks, with five storage levels. These are 8.6/7.25/6.9 m deep and run by the Pallet Shuttle system. This solution makes maximum usage of each millimetre of the warehouse to provide higher capacity. At the same time, it streamlines inputs and outputs of the goods, since it is the motorised shuttle which carries out the movements autonomously. All of this turns it into an excellent storage system for consumer products, by being able to house a greater number of pallets and ensuring their quick input and output.

The Pallet Shuttle's operations stand out for their simplicity and for requiring minimum hands-on help:

1. The operator uses a reach truck to insert the motorised shuttle into the corresponding channel.
2. The operator sets the pallets in the first position of the racks.
3. The Pallet Shuttle moves the pallets directly up to the first open location inside the channel autonomously.
4. The same operation is performed in reverse order to remove the goods.

Operators use a Wi-Fi connected tablet to send movement orders to the motorised shuttles. With this device, they can select the quantity of pallets they want to be inserted and extracted, carry out inventory counts or manage authorised personnel.



Advantages for Plásticos Vidal

- **Maximum storage capacity:** the four storage solutions have a 23,480-pallet capacity, all together.
- **Optimal organisation:** the sectoring of the warehouse and the inclusion of pallet racks, drive-in racks, those for picking and those run by the Pallet Shuttle facilitate the classification of the goods based on their features.
- **Efficient order picking system:** the distribution of the goods helps to optimise operator movements and, ultimately, speeds up picking.



Technical data

Pallet racks

Storage capacity	13,695 pallets
Pallet size	800 x 1,200 mm
Max. pallet weight	800 kg
Racking height	9 m

Longspan shelving for picking

Number of bays	90
Bay size	3,300/2,225 x 1,000 mm
Racking height	3 m

Drive-in racking

Storage capacity	6,465 pallets
Pallet size	800 x 1,200 mm
Max. pallet weight	800 kg
Racking height	10 m

Pallet Shuttle system

Storage capacity	3,320 pallets
Pallet size	800 x 1,200 mm
Max. pallet weight	800 kg
Racking height	11 m