

Case study: Super Nosso

A distribution centre with over 3,000 orders a day

Location: Brazil



The Brazilian supermarket Super Nosso has opened a new 25,000 m² distribution centre in Contagem (in the state of Minas Gerais). Mecalux has equipped it with 15 m high pallet racks with a total storage capacity of 37,800 pallets. These offer direct access to the products, which simplifies preparing the 3,000 daily customer orders.



Weekly shopping from home

Super Nosso was founded in 1998 as a mining company, but today is a supermarket that sells its products on the Internet. The company provides its services in the Brazilian city of Belo Horizonte and its metropolitan region. Since beginning its activity in the sector, Super Nosso has tried to offer an innovative, convenient and secure system that enables customers to make their online purchases 24 hours a day. One of its main priorities is timely deliveries to achieve a better user experience. Super Nosso recently opened a new 25,000 m² distribution centre in the Brazilian town of Contagem. Its strategic, well-connected

location minimises delivery times not only to Super Nosso's and shops, but also to the Apoiointrega website, Apoió Mineiro's supermarkets in Belo Horizonte and to the DEC Minas Distribuição wholesaler.

Super Nosso's needs and solution

The sector is expanding and companies need innovative products and processes to outperform their competitors and strengthen their market presence. For its own business in particular, Super Nosso wanted to provide the same quality products as can be purchased in any supermarket, while ensuring that orders were delivered on time. From the outset, the company was very clear that transport and logistics play a major role in meeting these objectives.

A warehouse's design is also one of the keys to making a company more competitive. In that sense, Super Nosso was very strict and requested a very large and efficient space to get the most storage capacity out of the building.

Super Nosso worked closely with Mecalux to equip it in five different stages, without interrupting the company's operations or ceasing to supply its customers at any time. The result is a centre consisting of pallet racks holding up to 37,800, 1,000 x 1,200 mm pallets.

This is a very busy facility: every day around 1,200 pallets are received and 900 are distributed to customers throughout the region.





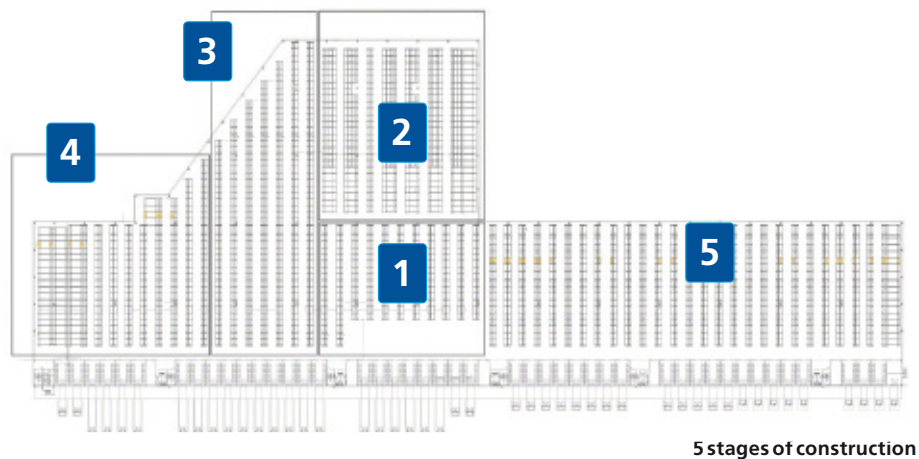
The products in greatest demand are placed at the ends of the aisles, closest to the loading bays, to speed up their movement in and out of the warehouse

Logistics challenges of online supermarkets

Generally, Internet sales focus on technology, leisure, culture, travel and fashion products. However, the food sector is also growing and more and more users are making their weekly purchases on major supermarkets' websites.

This e-commerce boom has posed a huge logistical challenge for food companies:

- Many orders have to be prepared, each one consisting of a few picking lines.
- The products have a limited expiry date, which means the goods have to be more closely monitored.
- Food must be kept in good condition and the cold chain of refrigerated or frozen food must be scrupulously maintained.
- Users demand deliveries in a very short space of time (even on the same day).



Roberto Coelho
Logistics Manager

“Mecalux understood all our needs perfectly and has provided us with a high-quality solution that helps us to be more competitive. Our installations let us make deliveries faster, and track products and control orders better.”

What is an online supermarket's warehouse like?

Almost the entire warehouse area is occupied by 15 m high pallet racks, providing direct access to the pallets. This means products can be inserted and removed from their respective locations very quickly.

"The pallet racks have been perfectly adapted to the available space and make the most out of our warehouse surface area," explains Roberto Coelho, Super Nosso's Logistics Manager. "Moreover, this solution was specifically designed to store our entire catalogue, made up of

very diverse products of different shapes, sizes and weights."

When housing such a large number of pallets, very precise control of all the products is essential to guarantee they stay in good condition, that the necessary goods are in stock to meet customers' needs and to minimise any possibility of errors when storing goods and picking orders.

Therefore, each location is assigned to a single SKU. Mainly, the pallets are allocated to storage locations in the warehouse according to the products' char-

acteristics, the level of demand and their packaging.

For example, food products are kept separate from the rest, chocolate is grouped together in the same air-conditioned area, and more expensive goods, such as make-up, are protected in areas with restricted access.

"The racks can store as many the pallets as we need. Direct access also helps us to deal with warehousing and order picking tasks quickly," points out Roberto Coelho.





How to prepare 3,000 orders a day

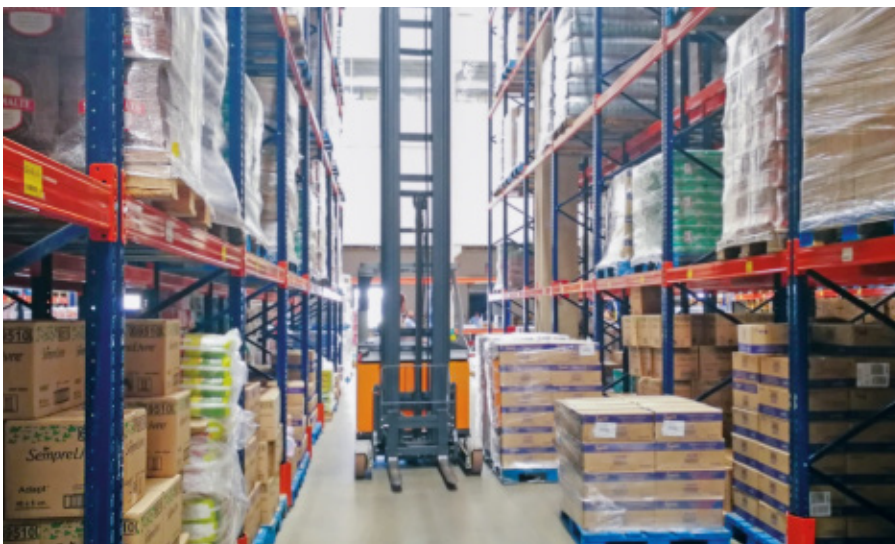
Picking is one of the main operations in an e-commerce company's warehouse, and Super Nosso is no exception. Around 3,000 orders are prepared every day, each consisting of 15 order lines.

Because of this volume of work and the warehouse's size (the longest aisle measures 113 m), it is essential to carefully organise the operations and workers. Each

is assigned a specific area for picking. This prevents several operators from meeting in the same aisle (which would hamper them and slow down their work).

This operation, which takes place on the lower rack levels, consists of taking the SKUs that make up each order directly from the pallets. Once the order has been completed, it is transferred to the consolidation area, just in front of the load-

ing bays, where it is checked for errors. Reserve products are stored on the upper levels of the racks. As a result, the necessary goods are always available and there are no interruptions in picking. This translates into good service and orders can be prepared and delivered on time. Reach trucks are used to load and unload pallets from higher locations. The aisles between the racks are 3 m wide so that the handling equipment can be safely manoeuvred.





Advantages for Super Nosso

- **Maximum storage capacity:** the Super Nosso distribution centre stands out for its large dimensions and for providing storage capacity for 37,800 pallets.
- **Versatile system:** the pallet racks adapt to the dimensions of the Super Nosso unit loads.
- **Easy access to the goods:** direct access makes managing pallets and preparing 3,000 orders daily easier.



Technical data

Storage capacity	37,800 pallets
Pallet size	1,000 x 1,200 mm
Max. pallet weight	1,300 kg
Racking height	15 m
Max. racking length	113 m

