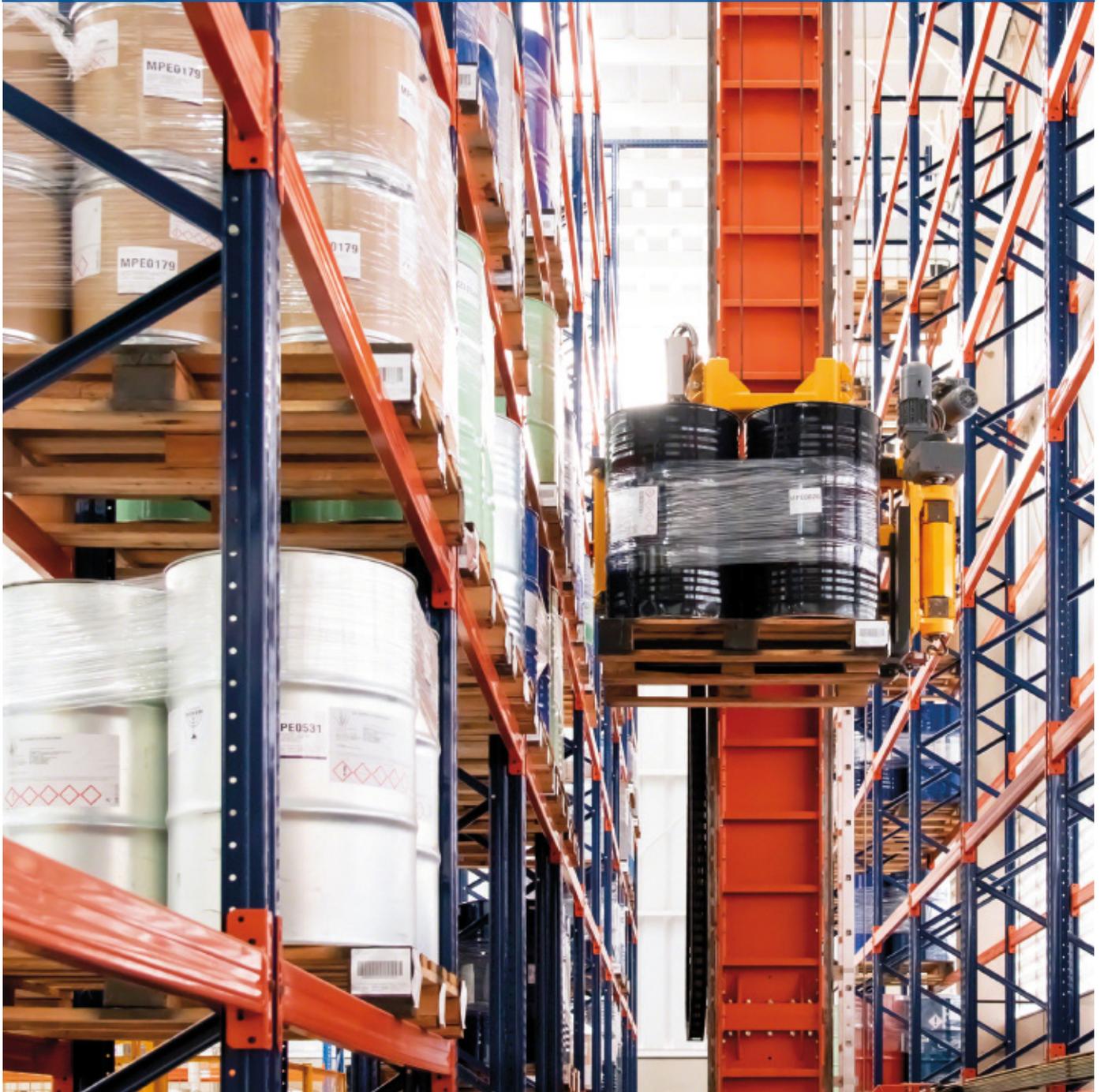


Case study: Aromaty Fragrances

The aroma of automated warehousing

Location: Brazil



Aromaty Fragrances, a Brazilian fragrance manufacturer, has completely turned its logistics around by opening an automated warehouse in Louveira (a town in São Paulo State). The warehouse, designed to house raw materials, also features the Mecalux Easy WMS management system. This software takes part in all operations and controls the stock in real time. Automation has given the company many advantages, mainly efficiency, safety and speed when handling goods and distributing orders.

Passion for perfume and robotics

Since it opened in São Paulo (Brazil) in 1996, Aromaty Fragrances has dedicated itself to helping many brands develop their fragrances. The company creates unique, attractive scents, which undergo rigorous testing in its in-house laboratories to ensure maximum quality and shelf life.

Aromaty Fragrances believes that passion and technology are two indispensable ingredients driving its business: a passion for fragrances, for creating perfumes that transcend the standard bouquet of aromas and automation to keep pace with market changes.

In 2017, it launched a new production centre in Louveira (70 km from São Paulo) to meet recent years' growing demand. It oc-

cupies a total of 5,500 m² surface area and includes offices, a laboratory, a fully roboticized design centre and a raw materials warehouse.

Raw materials warehouse

The company approached Mecalux when it was time to equip its warehouse. This centre, where the raw materials are deposited, stands out for its straightforward operation. Daily, it receives the goods sent by vendors, stores and sends them to the production centre at the opportune moment.

As it is dealing with chemical products, it must handle these items with the utmost care and precision, all to minimise potential incidents. *"Storing such sensitive products is a hard, dangerous task. So, we*

wanted to make sure products stay intact," explains Alfredo Del Vigna, president of Aromaty Fragrances. Plus, a company priority was to maximise surface area usage: *"lack of space was our main concern,"* says Del Vigna.

Mecalux has installed an automated warehouse based on these considerations. It comprises a single aisle with single-depth racks on each side measuring 12 m high and 30 m long, with a total storage capacity for 384 pallets. Here is where the company stores all its raw materials in barrels, grouped on pallets to facilitate both handling and transportation.

The stacker crane runs the input, location and output tasks for the goods. The machine has a rotating head. Thus, pallets can be picked up and left in three positions: one frontal and two lateral. According to Del Vigna, *"the automated warehouse has simplified all our logistics. Storage processes are now much faster and safer."*

Modern logistics

Determined to modernise its logistics, Aromaty Fragrances also planned to implement an efficient warehouse management system (WMS), *"the best in the world,"* underlines the president. As a result, it opted for Easy WMS, the WMS developed by Mecalux. This system oversees receptions, assigning locations to the goods and ordering pallets to be sent to production.



Alfredo Del Vigna President of Aromaty Fragrances

"We are gearing up for Industry 4.0 by incorporating new technologies into our processes. And, we are succeeding thanks to Mecalux, a powerful ally which has helped us reach our potential in storage tasks and raw material movements."



The trilateral stacker crane



Upper part.
Having no upper guide base made it easier to install.



Guide rails. Guided by two rails fixed to the floor, it has an eight-wheeled travelling gear that facilitates its movement.

15_m
max. height

1,200_{kg}
max. load

30_{m/min}
lifting speed



Extractor element. The trilateral fork driven by a head moves to the left, right or front to access the load.

Before installing Easy WMS, the company used its ERP to control all of its business activities including a part of its logistics (basically, which products were received and which were sent to production). However, as Del Vigna points out, *“we wanted to know the exact location of each item.”*

The WMS identifies each product as soon as it arrives at the warehouse. Immediately, it assigns a location based on its size and demand level. For example, consumer goods are put at aisle ends to optimise

stacker crane movements. For on-time raw material delivery to production, Easy WMS needs to be connected to the company’s ERP to meet production requirements. Both systems talk to each other constantly to coordinate warehouse and production

processes. A cloud-based Easy WMS was deployed. The most notable advantage of this version is that applications can be accessed from any device with a web browser. The system also easily adapts to Aromaty Fragrances’s operations volume.

Driving Industry 4.0

Aromaty Fragrances has totally restructured its logistics with help from the new Mecalux automated warehouse. In the words of Del Vigna, *“it has been a huge breakthrough for us in Industry 4.0.”*

Automation has ensured the immediate, safe supply of products, accelerated movements and enabled better responsiveness to customer demands.

The deployment of Easy WMS also brought about major progress for the company: real-time inventory insight, traceability and overall process optimisation.

Successful goods distribution enhances Aromaty Fragrances’s warehouse performance thanks to optimised stacker crane movements



Advantages for Aromaty Fragrances

- **Top performance:** the Aromaty Fragrances warehouse boasts fully-automated operations with a trilateral stacker crane that handles incoming and outgoing goods.
- **Maximum safety:** the stacker crane is extremely safe when handling chemicals and prevents any potential incidents.
- **Trace and control goods:** the WMS identifies each product from the time it arrives at the warehouse. So, real-time inventory statuses are now a "reality" for the company.



Technical data

Storage capacity	384 pallets
Pallet dimensions	1,150 x 1,150 and 1,000 x 1,200 mm
Max. pallet weight	1,200 kg
Racking height	12 m
Racking length	30 m

