Normon handles up to one million medications daily with Mecalux technologies

The pharmaceutical company demonstrates its commitment to innovation with advanced solutions that optimize every stage of its supply chain.

Country: **Spain** | Sector: **pharmaceutical**

CHALLENGES

- Manage soaring pharmaceutical demand, increasing order volumes up to four or five times.
- Expand storage capacity to accommodate full production output.
- Automate order fulfillment without interrupting service to clients.

SOLUTIONS

- Automated rack-supported building for pallets, Shuttle System, High-performance pick stations, conveyors and lifts, warehouse control system, carton flow racks.

BENEFITS

- Distribution of one million medications daily to clients across five continents.
- Automated storage of 25,000 pallets and 22,000 boxes of generic drugs.
- Implementation of cutting-edge technologies that boost supply chain productivity.

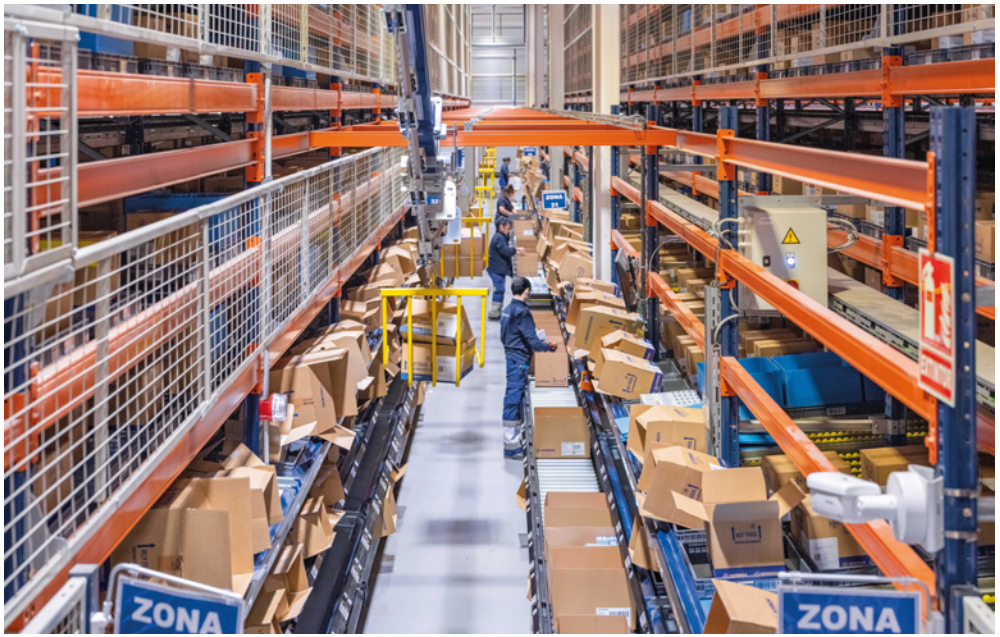
Normon is a leading Spanish pharmaceutical company, pioneering generic medication distribution since 1997. With a strong track record and an international focus, it has become one of Europe's top manufacturers. Its mission is clear: to deliver high-quality, accessible treatments tailored to society's needs.

» **Founded: 1937**

» **International presence: 90+ countries**

» **No. of employees: 3,200**

Renowned for its innovative approach and dedication to continuous improvement, pharmaceutical company Normon constantly modernizes its supply chain to stay at the forefront of the industry. At its central plant in Tres Cantos (Madrid), the business has implemented advanced logistics systems in collaboration with its trusted partner Mecalux.



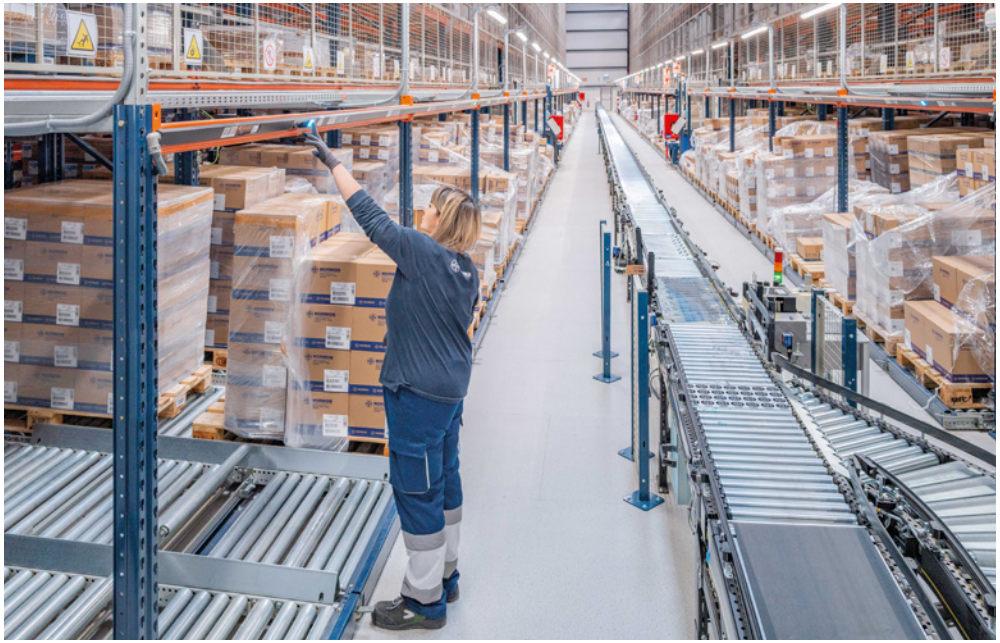
Robotics also satisfies the need to adjust logistics processes to faster production paces and increasingly complex operations. Normon faces the challenge of managing highly diverse orders, varying in volume, urgency, and destination. This complexity demands a flexible, precise workflow capable of adapting to each client's specific requirements. The goal is clear: to fulfill every order accurately and deliver it on time, ensuring efficient, reliable service.

Rack-supported warehouse: a strategic zone

Pallets from the production plant are unloaded via an automated platform and integrated directly into this storage system, which maximizes capacity.

At the heart of the operation lies a two-level picking area. Guided by pick-to-light technology, warehouse associates retrieve boxes from 272 triple-depth flow channels, ensuring constant availability and continuous fulfillment. Boxes then enter the conveyor line and are routed to either the shipping area or the Shuttle System.

Associates work in an order picking area equipped with flow channels up to five positions deep



Present across five continents, Normon supplies hospitals, pharmacies, and dental clinics with a broad range of therapeutic solutions

"To meet growing domestic and international demand, Normon has expanded its logistics capacity, preparing to handle up to five times more orders without disrupting service to hospitals, pharmacies, or clinics," say Normon representatives.

Thanks to a three-level infrastructure connected by lifts and conveyors, all finished-product flows are now autonomous, enhancing process efficiency, safety, and traceability. Key upgrades include an automated pallet warehouse, the Shuttle System, and high-performance pick stations.

Automation streamlines picking, enabling the company to ship around one million medications a day. "Products from our manufacturing plant are stored in the new storage systems, where they're picked for worldwide distribution," say representatives from Normon.

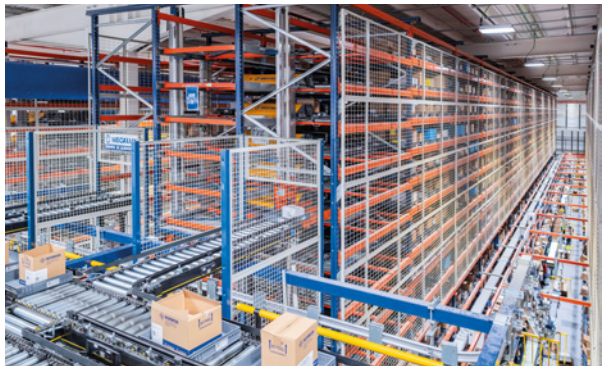
Technology drives automated flow

At Normon's automated facilities, technology ensures smooth, safe, and demand-responsive logistics operations. Mecalux's warehouse control system (WCS) coordinates the operation of all robotic equipment: the stacker cranes, motorized shuttles, and load platforms. This software manages up to 6,900 box movements per hour.

A network of over 100 scanners distributed throughout the facility identifies each unit in real time via barcode or QR code. These data are processed in under 200 milliseconds, enabling the software to automatically assign the most efficient route based on destination and workload.

The WCS communicates with Normon's warehouse management system to ensure efficient replenishment in picking zones, maintain optimal inventory levels, and organize shipments without interruptions. It adapts to boxes of different sizes and weights, adjusting flows according to each area's operational capacity.

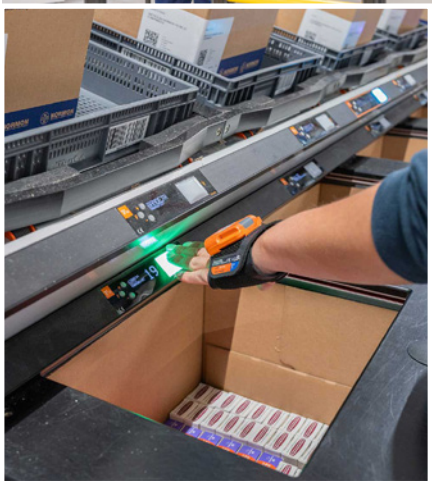
In addition to accelerating order picking, this setup reinforces traceability, safety, and responsiveness to clients' needs.



Mecalux's WCS processes thousands of real-time data points to move over 70 types of boxes automatically

AS/RS for mass picking

At Normon, the Shuttle System is an automated storage and retrieval system (AS/RS) designed to support large-scale order picking. Forty-six shuttles handle boxes in triple-depth racks with a capacity for 22,000 units. Stored on 16″ x 16″ trays, the boxes are managed automatically. This technology allows associates to focus on order assembly while the system handles replenishment.



High-performance pick stations have quadrupled productivity in the order picking area

Orders are fulfilled from two types of stations:

Manual pick stations. Located on the sides of the AS/RS, these incorporate shelves with up to five positions deep for selecting the required items.

High-performance pick stations. These optimized setups enable warehouse pickers to handle four SKUs at once as they fill up to six orders simultaneously in final shipping boxes.

With the new design, based on ergonomics and productivity, associates work in fixed, comfortable positions with products always within reach. This approach has significantly increased throughput in the order picking area, enhancing both operational agility and equipment performance.

End of the warehouse journey

Completed orders move automatically to the verification area, where occasional double-checks are carried out before shipping. All boxes pass through a machine that folds and seals them to minimize volume, streamlining logistics and transportation costs.

The boxes are then sorted via a three-strand conveyor system, which lowers them to the shipping area on the first floor. There, associates use RF scanners to pick boxes as they move along 140 carton flow racks, placing them onto pallets for delivery to clients.

Productivity in pharmaceutical handling

Normon's commitment to automation and innovation translates into continuous improvement in logistics operations. Every step of the supply chain is designed to ensure efficiency, accuracy, and scalability.

The solutions implemented have optimized tasks, enhanced traceability, and raised service quality. This upgrade lays the groundwork for growth, ensuring the logistics network can respond to new demands quickly and reliably.