

COSMIC**Case study: Industrias Cosmic**

Industrias Cosmic automates with an all-encompassing logistics centre by Mecalux

Location: Spain



The installation at Industrias Cosmic in Caldes de Montbui, Barcelona, consists of an automated warehouse with live channels and a picking station at the front, plus a warehouse with adjustable pallet racking for bulkier products. The project included the Mecalux Easy WMS warehouse management system, responsible for managing all the activities carried out at the site.



ing to work internationally, it became the benchmark brand not only for accessories but also for bathroom furniture. The success of this new way of understanding bathroom space led the company to export more than 50% of its production and set up a presence on all five continents.

Needs of Industrias Cosmic

Industrias Cosmic, founded in Barcelona in 1985, began as a family business manufacturing quality bathroom accessories.

Fifteen years later, after establishing itself within the domestic market and start-

In view of this incessant and rapid growth, Industrias Cosmic commissioned Mecalux to improve its logistics centre, expanding its storage capacity and speeding up order picking to be able to keep up with the high pace of work already forecast in the short- and medium-term.

One of the main objectives of Industrias Cosmic was to have a picking area capable of preparing high numbers of orders they required, especially those related to products with high and medium turnover (types A and B)



**Automated warehouse:
solution provided by Mecalux**

An automated warehouse 12.5 m high and 76 m long was installed, with two double depth aisles with capacity to store up to 3,674 pallets.

High and medium turnover (type A and B) products are stored in this warehouse, where a picking area has been set up at the front and 44 live pallet channels on the ground level of a lateral rack.

Each aisle is accessed by a stacker crane which is responsible for moving pallets from the main conveyor system to the location assigned by the Easy WMS warehouse management software.



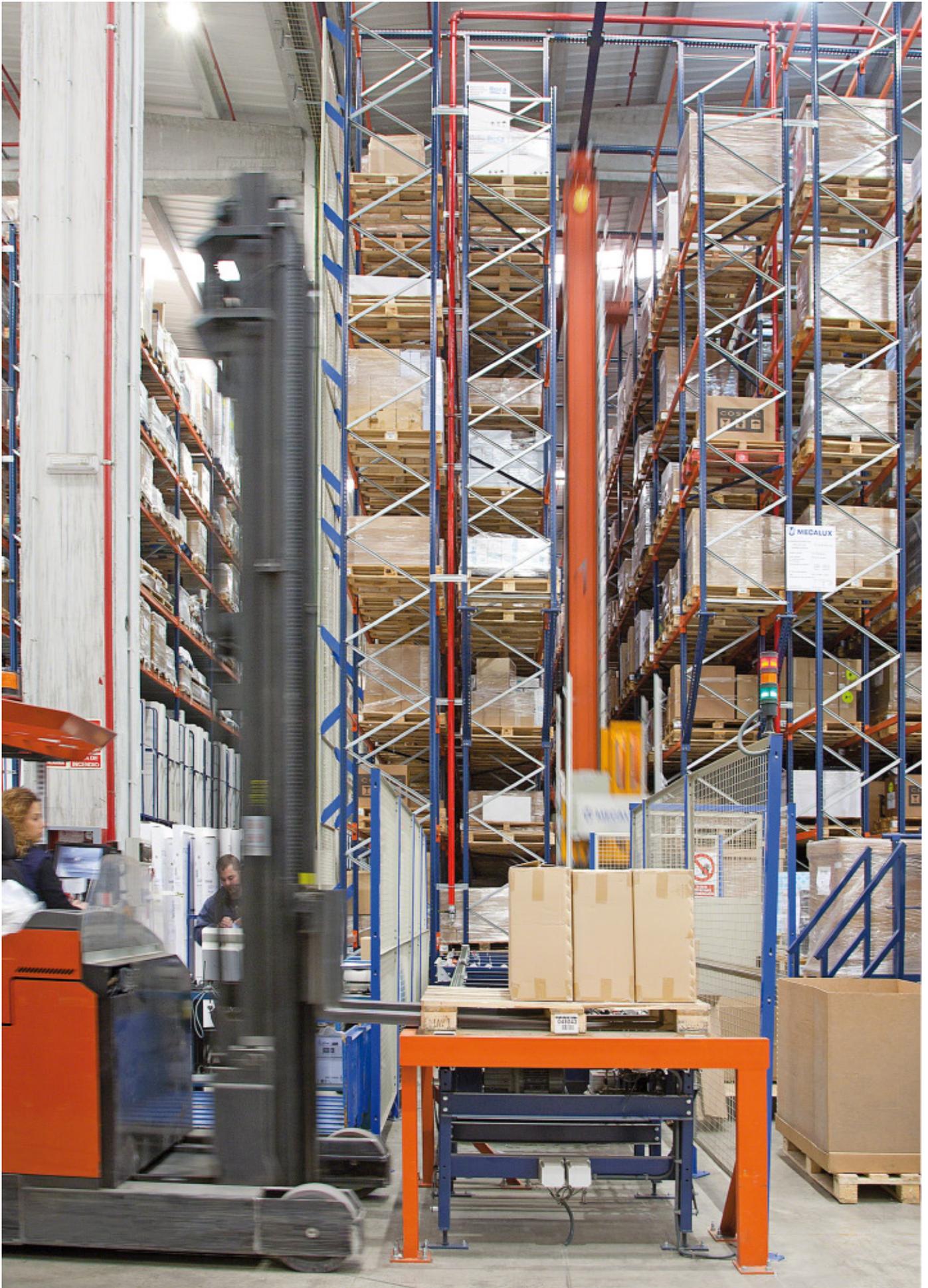
**WAREHOUSE AREA RESERVED FOR STORAGE CAPACITY
EXPANSION AT INDUSTRIAS COSMIC**



Incoming and outgoing processes in the warehouse are performed using a conveyer circuit that incorporates a pallet checkpoint. This checkpoint is used to check that the dimensions, weight and condition of the pallet meet the specifications of the installation.

Taking into consideration the continuous growth being experienced year after year by Industrias Cosmic, an area has been reserved next to the automated warehouse to expand storage capacity in the future.





Picking process

Picking is carried out in three different ways, which are complementary:

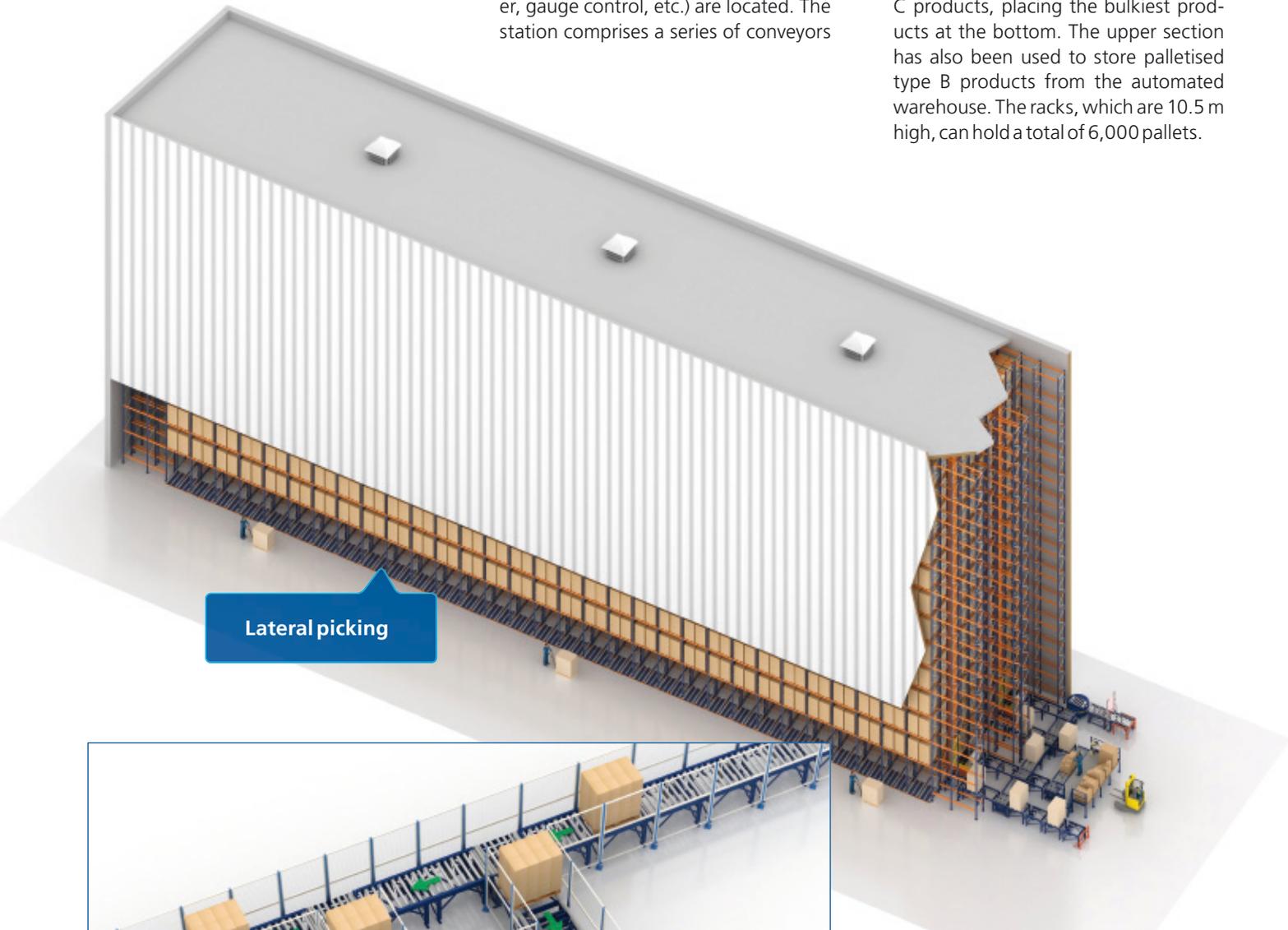
- Picking in live channels: picking of high turnover products (type A) is carried out in the 44 live channels for pallets which run along the lower ground level of a lateral rack. The channels face outward, so that the end leads to the aisle where the operator performs picking with the assistance of a pallet truck. Full pallets

in reserve are stored in the racks which remain above the live channels, so that the stacker crane can keep replenishing them as they are emptied.

- Picking station: a U-shaped picking station has been provided at the front of the automated warehouse for medium turnover products (type B). Since it is U-shaped, the different picking functions are performed at the front of the station, where the various assistive devices (screen, barcode reader, gauge control, etc.) are located. The station comprises a series of conveyors

that bring the pallets to the operators, streamlining order picking. The operator, who works in waves of five orders at a time, takes the necessary material from the pallets to deposit it on another container or pallet. Once the order is prepared it is sent to the consolidation or dispatch area.

- Picking in adjustable pallet racks: next to the automated warehouse, six conventional double-depth pallet racks are arranged for picking involving type C products, placing the bulkiest products at the bottom. The upper section has also been used to store palletised type B products from the automated warehouse. The racks, which are 10.5 m high, can hold a total of 6,000 pallets.



Lateral picking

These images show a similar solution to that of Industrias Cosmic



Picking station

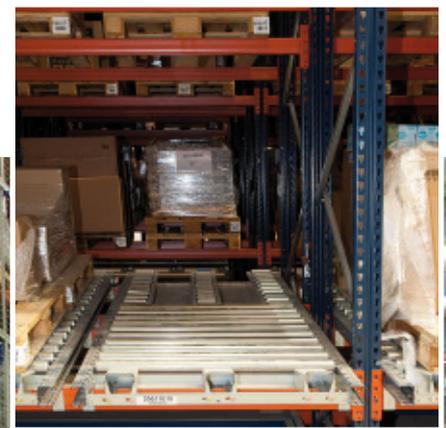


In addition to the picking station installed at the front, 44 live pallet channels have been enabled on the ground level

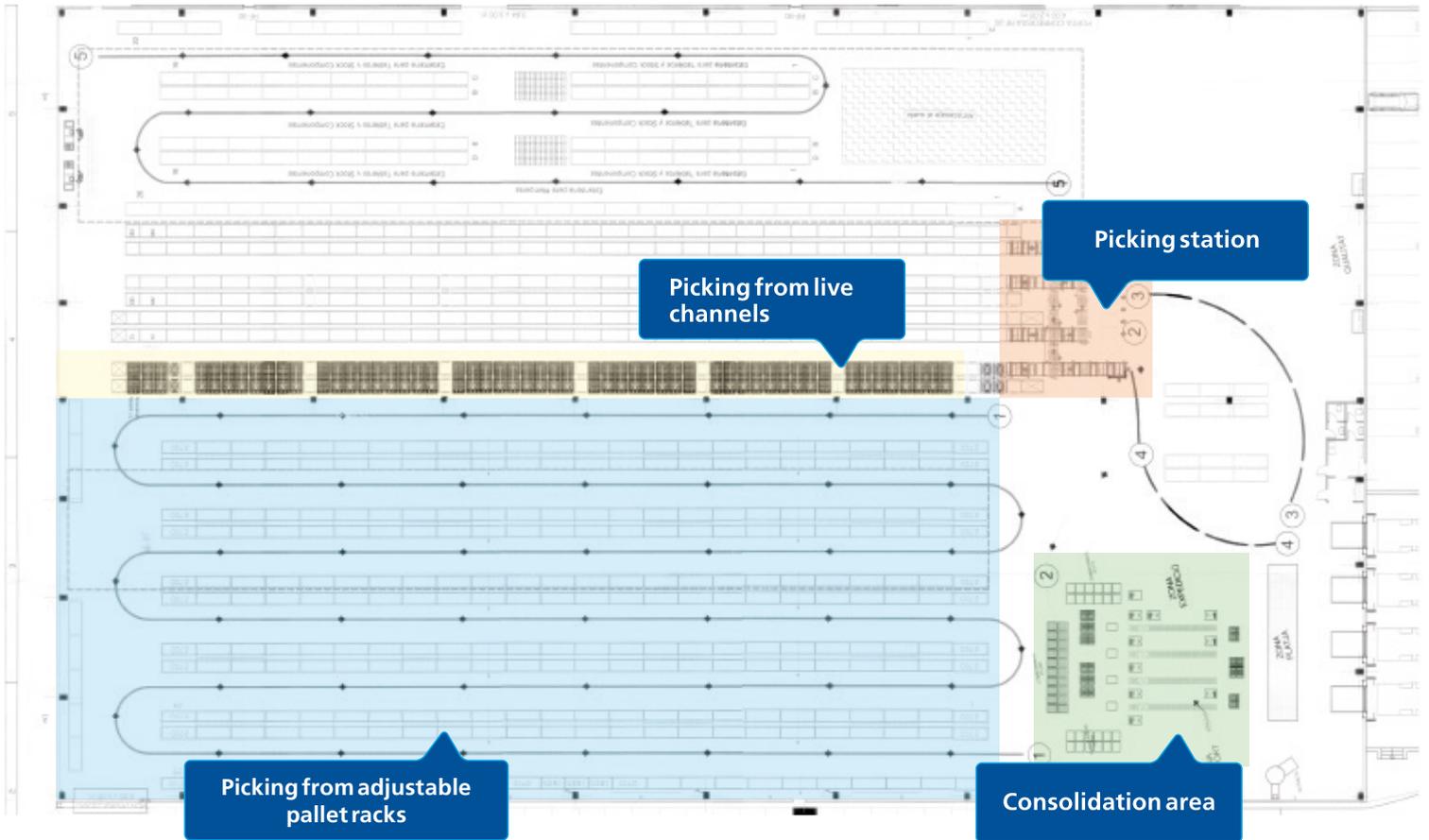
The consolidation of orders takes place in the area allocated for preloads, just in front of the adjustable pallet racking. In this area, the operators verify, package and make labels for shipping orders.

To complete the operation prep tables, computers and printers have been set

up. Once fulfilled, orders are sent to the preload area located at the front of the loading docks.



Live channel for picking



Mecalux Easy WMS: warehouse management system

This powerful system works through multiple parametrisable rules and covers all the different operations that take place in a warehouse, from the entry of the product, then on to stock control and order picking, all the way to order dispatch.

The Easy WMS and the Enterprise Resource Planning System (ERP) have a permanent bidirectional connection in order to allow and facilitate the rest of the operations that take place outside the warehouse, which are essential to any business.

The management of the different areas of the Industrias Cosmic warehouse are handled by Easy WMS, the warehouse management software by Mecalux that uses computer terminals to control the operations that are performed



Advantages for Industrias Cosmic

- **Capacity drastically increased** the Industrias Cosmic automated warehouse works with double-depth racks that offer a storage capacity of 3,674 pallets in a surface area of only 1,100 m².
- **Efficient picking:** small product picking with high and medium turnover has been streamlined as a result of the combination of live channels and the picking station located in the front area of the warehouse.
- **Each product in its place:** the storage solution has been installed that best adapts itself to the characteristics and needs of each product with which Industrias Cosmic works, achieving perfect turnover and increasing productivity.
- **Flexibility for future growth:** an area has been reserved next to the automated warehouse in which to install the storage system best suited to the future needs of the company.
- **Perfect stock control:** thanks to Mecalux Easy WMS, Industrias Cosmic can manage all the movements, processes and operations that take place within its warehouse.

COSMIC

Technical data

Automated warehouse capacity	3,674 pallets
Pallet racking warehouse capacity	6,000 pallets
Maximum pallet weight	800 kg
No. of stacker cranes	2
Type of stacker crane	single-mast
Type of fork	double depth
Height of automated warehouse	12.5 m
Live channels for picking	44
Fixed station for picking	1

