

Automation and digitalization drive order picking

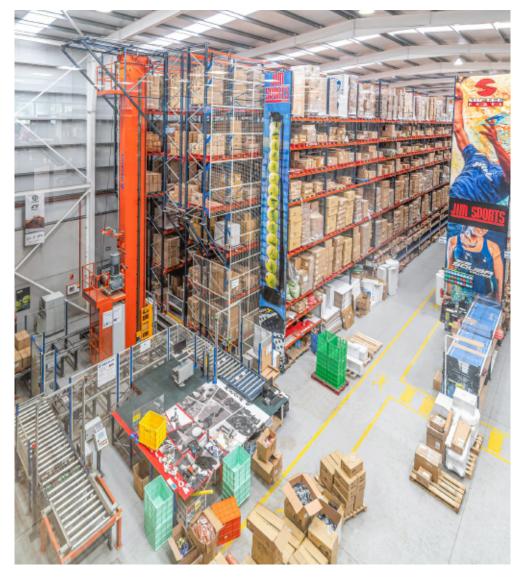
Jim Sports, a distributor of athletic equipment, manages more than 17,000 product SKUs with an all-in-one solution: automation, software, and storage systems.

Country: **Spain** | Sector: **Sports & leisure**

Founded in 1997, Jim Sports is Spain's largest sporting goods distributor. The company sells 30-plus brands that cater to all athletic needs, from balls and elliptical bicycles to microfiber towels, rackets, and goalposts.

- » Founded in: 1997
- » Headquarters: Palas de Rei (Spain)
- » Brands: 30+
- » International presence: 35+ countries
- » Catalogue: 17,000+ SKUs







CHALLENGES

• Cope with **rising order numbers** in sporting goods stores.

• Control the status of **thousands of SKUs** from over 30 different brands.

• Adapt warehouse **processes** to meet specific customer requirements.

SOLUTIONS

• **Easy WMS** warehouse management software.

• Warehouse **Slotting** Software.

Supply Chain Analytics Software.

Multi Carrier Shipping Software.

Account Directives.

• **AS/RS** for pallets.

Pallet racks.

BENEFITS

• Agile distribution of up to **500 orders a day** to 35+ countries.

• Strategic distribution of **17,000+ SKUs** in the facility to streamline operators' tasks.

• Creation of delivery **notes and labels** in customers' languages.

In recent years, Jim Sports has evolved and expanded at a rapid pace, increasing its presence in an ever-growing number of countries. "We had to modernize to adapt to business changes. To remain competitive, we needed to optimize our logistics processes," says Marta Gontá, Chief Technology Officer (CTO) of Jim Sports.

Every day, Jim Sports' 2.5-acre warehouse in Palas de Rei, Spain, ships 200 to 500 orders — depending on the season — to 3,500 sporting goods stores and facilities in 35 countries. The company has overhauled its logistics center to handle the surge in workload. "Initially, all warehouse operations were manual, from organizing the merchandise to allocating tasks among the workers. As the number of orders to fill and ship began to grow exponentially, we realized that optimizing our operations was a must. We had to change," says Gontá. Mecalux equipped Jim Sports' warehouse with a comprehensive solution featuring automation, software, and storage systems. As a result, the logistics center is now more expeditious in processes as complex as order fulfillment. "We decided to partner with Mecalux on this project because it's a logistics solutions provider with a significant advantage: it can assist us 24 hours a day. Because of the nature of our business, we can't afford to halt activity in our facility at any time. If an incident were to occur, we'd need a quick solution. This is something that Mecalux has provided us with, which sets it apart from other companies," says Gontá.

The first step in transforming Jim Sports' supply chain was to equip the logistics center with a robotic solution from Mecalux: an automated storage and retrieval system (AS/ RS) with double-deep racks. With a height of 46', this solution provides capacity for 2,176 pallets. "We turned to automation due to our ongoing space challenges. With this system, our goal was to accommodate the highest number of products within the minimal space available," says Gontá.

Digital warehouse

Jim Sports also had to simplify operations in its logistics facility and streamline order shipments. Assisting operators was essential for preparing orders as quickly as possible. To speed up processes, the distributor decided to install Mecalux's Easy WMS warehouse management software. "With increasing order volumes, we had to hire more people. And the new operators aren't necessarily familiar with all 17,000 SKUs in stock. The software is intuitive and user-friendly. From day one, pickers can fulfill orders by following instructions from the WMS on their RF scanners," says Gontá.

Through digitalization, Jim Sports has minimized any possibility of error and accelerated goods movements. Mecalux's Easy WMS is a software program that adapts easily to changes in the company's business. "We've updated the system to align it with our new needs and enhance performance. Before, for instance, a single operator would prepare an order from start to finish. Now, we're more efficient because the whole process is done in a chain: some workers perform picking, while others package products, distribute orders, or restock," says Gontá.

Mecalux's Easy WMS software is also modular: its functionalities can be expanded based on an organization's requirements. Jim Sports has implemented four additional digital solutions to address its new business scenarios:

» Warehouse Slotting Software: suggests a redistribution of storage locations based on turnover or orders received.

» Supply Chain Analytics Software: provides valuable data on the main warehouse activities to facilitate strategic decision-making that raises productivity.

» Multi Carrier Shipping Software: simplifies and expedites the packing, labeling, and shipping processes. The program integrates with the carriers that distribute Jim Sports' orders (namely SEUR, DB Schenker, Correos, and CBL).

» Account Directives: personalizes and aligns warehouse processes with the particular needs of each customer.

A day in the Jim Sports logistics center

"Our catalog is extremely large and varied. We have more than 30 brands, ranging from our own, such as Softee, to exclusive distributions like Rox, Vibor-A, Wilson, ShockOut, Ball Rescuer, and Mikasa. Managing such



diverse products is our main challenge, but with Easy WMS, organizing the merchandise is much simpler," says Gontá.

Jim Sports' logistics center is divided into different work spaces, namely the storage, picking, packing, and shipping areas. Every day, the facility receives a multitude of SKUs sent by suppliers in Asia, chiefly Bangladesh, China, India, and Pakistan.

In the receiving zone, operators read the barcodes on the merchandise, and Easy WMS then records them in the database and assigns them a location. Each item has a defined profile with specifications — e.g., size and demand level — which the software takes into account when deciding on a slot for it. "Imagine we receive bathing suits in October. It would be impractical to store them in the more accessible locations because they probably won't be sold until next summer," says Gontá.

"With such a high number of SKUs in stock, order is crucial in our warehouse. Thanks to Easy WMS, we now organize our goods much more effectively. With everything in its place, our operators can carry out their tasks with greater peace of mind. The work has become a lot simpler," says Gontá.

Once the products are stored in their corresponding slots, picking takes place. In their designated zones, operators gather all the merchandise they require using a cart. They prepare orders by batch, meaning several are put together at once on a single run. After the orders are completed, they are moved to the packing area. There, operators verify that each one contains the items requested and that no mistakes were made.

The packing area is equipped with five work tables. Depending on the contents and desti-

nation of the shipments, they are packaged at one table or another. "For example, if an order has at least one bulky product, it will be packed at a specific table. We also have another table reserved for orders that contain fewer than 5 items, another for those with 6 to 12, and one more for orders exceeding a dozen items. This work organization prevents interference with other processes," says Gontá.

The last step consists of distributing the goods. In the shipping area, next to the loading docks, orders are grouped by carrier. The Mecalux software interfaces with the transportation agencies, transmitting all necessary information to ensure on-time deliveries.

Integrated solution for the logistics center

Jim Sports' supply chain is constantly changing to adjust to fluctuations in demand and the market. Over the past few years, the company has tackled the challenge of fulfilling a growing number of orders in the shortest time possible and for an expanding list of countries. "Our customers are sporting goods stores that have seen an upturn in sales and need to deliver orders ASAP. Jim Sports' priority is to supply them without delay," says Gontá.

With an end-to-end solution from Mecalux featuring automation, software, and storage systems, the sports equipment distributor is prepared to accelerate its pace of expansion. "Shifts in demand compel us to enhance our processes. We're aware that the way we used to work hindered our growth. But by automating and digitalizing our logistics operations, we've transitioned from a small company to a sizeable enterprise capable of satisfying more customers," says Gontá.



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"Our logistics operations are complex, with a wide variety of SKUs and customers. Easy WMS has become an indispensable tool for all our processes, especially considering our high daily order volumes and the massive quantity of different SKUs we stock. Managing such a large amount of merchandise manually is unfeasible."

> Marta Gontá CTO, Jim Sports



Warehouse Slotting Software: optimized location management

Stock control was vital for Jim Sports' supply chain. The way in which goods are organized has a direct impact on the performance of picking operations. With merchandise distributed strategically, operators are faster at locating the SKUs they require to fill orders.

Warehouse Slotting Software — an extension of Easy WMS — is specially designed to determine the ideal location for each product. This program distributes each SKU based on a set of rules and criteria predetermined by the logistics manager and an analysis of current, historical, and future demand. The software recommends arranging products according to sales forecasts and demand analysis. For instance, it groups SKUs that are normally ordered jointly. Thus, items that have historically been sold together i.e., tennis or padel rackets and balls — are stored together to optimize pick paths.

"If we slot a product in a suboptimal location, the program notifies us so we can correct it. Let's say, for example, that a product sells more than we'd anticipated. The software shows us where to place it to facilitate distribution to customers," says Gontá. Warehouse Slotting Software recommends a location for each SKU based on its current and historic turnover



Supply Chain Analytics Software: data analysis for greater efficiency

Through data analysis, Jim Sports has a detailed and objective map of its warehouse, enabling it to make strategic improvement decisions.

The company installed Supply Chain Analytics Software, a program that assists logistics managers in understanding the status of the facility and making more informed choices. This technology applies big data techniques to sort all information produced and convert it into actionable key performance indicators (KPIs). Armed with these KPIs, managers can make decisions to boost productivity. The software includes advanced dashboards that encompass the majority of functionalities to be considered in a warehouse (e.g., receiving rate per hour, orders delivered on time and in full, and occupancy rate, among others).

"Our business is partially seasonal. October and November are the strongest sales months, and for the past couple of years, we haven't had an off-season. Due to the nonstop work pace, it's challenging for us to decide when to reconfigure picking locations, clean the spaces, group pallets, and reconcile the merchandise received.

We need to analyze data that help us pinpoint the best time to perform all these tasks. With objective information, we can make strategic decisions to redistribute the workload in the center and be more efficient, ensuring swift order shipping," says Gontá. Supply Chain Analytics Software analyzes data generated in the logistics center to facilitate strategic decision-making for improvement





Multi Carrier Shipping Software:

improved organization of order distribution

"With digitalization, we've optimized shipping. Before, when operators finished preparing an order, they would go to the offices to hand in a copy of the delivery note, access the transportation agency's application, generate the corresponding labels, and place them on the parcel. It was a very labor-intensive process with a high risk of mistakes. Now, we're much more agile and effective with a software program that communicates with carriers and creates labels automatically," says Gontá.

Jim Sports has installed Multi Carrier Shipping Software, an Easy WMS functionality that automates shipment management to provide faster deliveries and ensure customer satisfaction. The program selects the most suitable transportation agency in line with the criteria established for each order. Multi Carrier Shipping Software forwards carriers all required information, i.e., the number of parcels to be distributed, their volume, and their weight. The agency confirms the operation instantly and sends the data to generate and print the labels and tracking number.

"When the operator picks the last item to complete an order and puts it in the box, the software systematically prints the label. We've minimized errors and trimmed the processes involved in shipping," says Gontá. Synchronization between the warehouse and delivery agencies facilitates the work of operators and carriers for fast shipments and on-time deliveries



Account Directives:

adapted and customized processes

One of the biggest challenges for any company is process personalization. Conforming to customers' specific requirements adds another hurdle to the already frenetic activity of a logistics facility.

Jim Sports has implemented Account Directives, an application designed to adjust warehouse operations to the needs of each customer.

"We sell primarily in Spain, but we're steadily expanding our market to more countries. So, we have to provide invoices to customers in the appropriate language. For example, with Account Directives, our customers in France receive delivery notes in French," says Gontá.

Apart from languages, Account Directives tailors processes to particular requirements. "Certain orders should include a packing list, while others don't need one. The software sends operators instructions to avoid mistakes," says Gontá. With Account Directives, Jim Sports personalizes warehouse processes to enhance its customer care and the services it provides