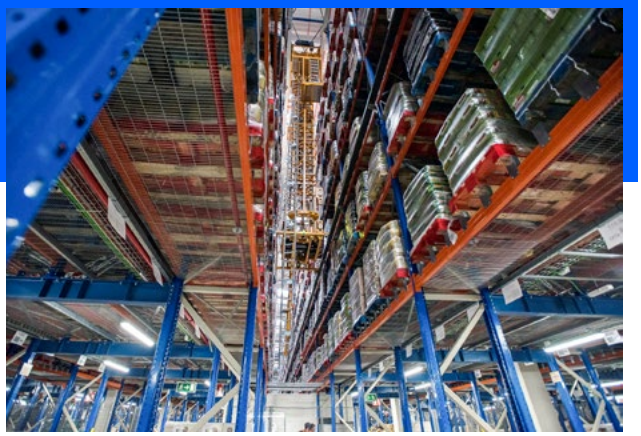
A Körber Industry Best Practice

An innovative warehouse concept

Boosting food's supply chain with automation.



Snapshot

Company	**Luís Simões**
Industry	**3PL**
Number of Employees	**2,370**
Warehouse Size	**24,000 m²**
Körber Competency	**Automation, Pallet handling Equipment and Voice technology**

Complexity

Develop a productive and sustainable business, while meeting market demand and global growth.

Best practice

An innovative and disruptive warehouse concept, with low energy consumption, system redundancy, system overall availability and reliability.

86.5K pallet locations

Picking productivity up by **15%**

safety risks reduced to **0**

In 2018, Luís Simões, one of the biggest logistics operators in the Iberian Penisula, chose Körber Supply Chain to build and operate their new, fully-automated distribution center.

In 2018, Luis Simoes opened a new facility in Guadalajara, which now handles a multinational Swiss group distribution operation – was an opportunity for the Swiss business to bring their Spanish logistics operation into the 21st century.

"For the last 11 years, they worked with another 3PL partner using a conventional and dedicated warehouse," says António Fernandes, Director of Innovation and Projects at Luís Simões.

For today's business world, the new solution had to be both productive and sustainable, while enabling growth to support the global ambitions of one of the largest food and beverage companies in the world.

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Luis Simões

The Warehouse of the Future
The automated system consists of a rack-supported high bay 36m high, served by 7 double-depth stacker cranes, handling two pallets at a time. This building is used as the bulk warehouse, and has a free-standing rack 20m high. The rack is served by ten overhead in-rack double-depth cranes, supporting intensive picking activities.

Truck load preparation is managed by two loops of 17 rail-guided vehicles (RGVs) – floor monorails – supporting full sequencing of loads for long-distance trucks, as well as smaller trucks or vans used for local distribution. In the reception area, the pallets, which come from either Luís Simões customer's local production facilities or other European factories, are checked, labeled, and diverted to the high bay using lifts and another circuit of 13 RGVs. Ultimately, Pet food is carried by a separate RGV loop of 3 vehicles, across a bridge, to a manual warehouse.

A separate middle floor, located above the shipping/reception area, is served by a fourth RGV loop with 20 vehicles to support co-packing and all the internal movements needed to maintain the operation. All operations are controlled by Körber Supply Chain WMS/MCF, fully developed in-house, including a Voice-Picking system.

Partnership for Success – for 10 Years
Luís Simões will be responsible for the entire Swiss group warehousing operation in Spain for 10 years. This contract represents a step forward and a consolidation of the distributor's role as the biggest food and beverage logistics operator in the Iberian Peninsula. Luís Simões and Körber Supply Chain have built a steady, trustworthy relationship since their first project together in 2008, creating one of the biggest automated distribution centers in Portugal.

Körber Supply Chain provided a turnkey automated warehousing solution, with a disruptive design. They also supplied the most modern automated equipment and software, which plays a crucial role in the optimization of the distribution center's operation.

"Thanks to the system's innovative design, the proven warehouse management and Körber's unique equipment, Luís Simões caught the end customer's attention and is using this distribution center as a showcase for future investments in warehouse automation."

Fernando Duarte, Project Manager of Luís Simões at Körber Supply Chain.

Körber Supply Chain will also be responsible for all maintenance operations for the duration of the 10-year contract.

Initial results are impressive, with productivity at the picking level up by 10 to 15%. "The fully automated system has also led to saving of over 30% in human resources costs.

Other details:
Compared to a conventional warehouse, the automatic 21,000 sqm warehouse is able to support more than 85,000 pallets against a total capacity of 75,000 pallets on an area of 50,000 sqm conventional warehouse space.

Energy consumption – although it is too early to measure the final result – in the first months is around 87% of the total capacity, and energy costs appear to be lower than a conventional warehouse.

Both points are important, not only for the business but also from an ecological point of view: reduced consumption and reduced land occupation.

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