

Logistics platform for prompt delivery



With the conception and realization of the new distribution center of the French LMC Group, Körber has created one of the most modern logistics centers in France. Intelligent material flows, continuous automation and powerful warehousing IT ensure high performance as well as the greatest possible responsiveness and service quality of the LMC Group.

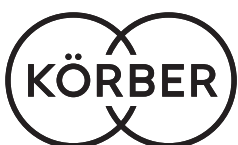
Customer

A growing range of items, the growing size of the products offered, and the increasing volume of orders had brought the storage capacity of the French LMC group - based in Bondues in northern France - to the limits of its productivity. The decision makers of LMC group, a leading supplier in the furniture industry in France and the Benelux countries, invested in the construction of a new distribution center. With the new building constructed from the ground up, one of the most modern and efficient distribution centres in France was established. Several tens of thousands of articles are stored in the new distribution center at the company's headquarters.

About 1,000 orders a day come in via the internet, mail, fax and telephone. Items ordered before noon will be delivered to the customer's location within 24 to 48 hours (depending on region) thanks to the integrated IT infrastructure and automated logistics for order handling.

Features and benefits

- **Throughput:
192 storage and retrieval/h**
- **4-aisles high-bay warehouse with
6,000 storing positions**
- **Shelving system in silo construction**



Special features / benefits

Positioning the picking workstations in the shipping area eliminates transports between order picking and preparation for shipping.

For LMC, the integrated material flows designed by Körber, together with the highest degree of process automation, ensure high performance and maximum ability to respond and provide rapid delivery. The applications K.Motion PMS-W and K.Motion PMS-M guarantee a high level of resource efficiency.

Solution

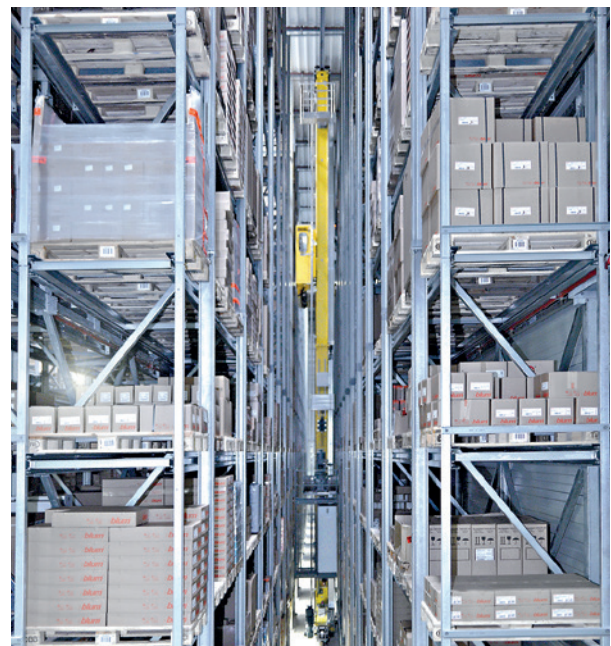
A specially designed, automated material flow with order picking according to the “Goods-to-Man” principle directly from the pallet. To achieve this, a four-aisle, high-bay warehouse in silo design was set up, with 6,000 pallet storage positions and single-deep storing. Pallets may weigh up to 900 kg. The IT-base is made up of the modular process management System (K.Motion PMS) using the K.Motion PMS-W module for warehousing, K.Motion PMS-M for material flow and K.Sight PMS-V for on-screen monitoring. Another special feature: the integrated material flows designed by Körber. The four storage and retrieval machines (SRM) serve four storing and four retrieving lanes.

A conveyor route leads the retrieved pallets on a



surrounding, circular conveyor system. It acts as a buffer zone, as well as a sequencing module for three picking stations in the shipping department; there, order picking takes place guided by K.Motion PMS-W. With confirmation of the picking orders, the conveyor system removes the partial pallets to the high-bay warehouse. At the same time, empty pallets are fed to an automatic pallet stacker.

The order pallets are given their shipping labels and then transported by forklift trucks to the outgoing goods doors for shipping.



Integrated components

The four SRMs, with two lifting devices each, working in double cycles, can store 192 pallets per hour and retrieve another 192. This high performance is the basis for the material flow concept designed by Körber. Throughout, the K.Motion PMS-W is designed to support both the automatic high-bay warehouse, and the picking processes. On this basis, the K.Motion PMS-M generates route-optimized storing and retrieval transports concerning the high-bay warehouse, ensures optimized control of the conveyor system, full-level control of the accumulation conveyors and picking stations, and the return of partial pallets. In addition, the material flow system manages three picking stations as well as the scanner-based data collection on the pallet conveyor system which measures 230 meters altogether. Operational modes, processes and availability are made transparent by the K.Sight PMS-V monitoring system.





Facts and figures

Industry

Furniture accessories

General contractor scope of delivery

- Roof and walls
- Steel structure
- Fire protection doors
- Conveyor system
- SRMs
- IT and control system

High-bay warehouse

L x W x H	87m x 19m x 22 m
Load units	Pallets
Storing positions	6,000
Weight	500 kg and 900kg
Type of storage	single depth

Stacker cranes (SRM)

Aisles / SRM	4 aisles / 4 SRM
Load handling device:	2 telescopic forks
Driving speed	180 m/min
Lifting speed	50 m/min
Throughput	192 storage and retrievals in double cycles

Pallet conveyor system

approx. 230 meters of roller conveyors /
chain conveyors

Workstations

- 3 picking stations
- 2 feeding and dispatch workstations for pallets
- 2 workstations for trouble shooting

IT-Base

- K.Motion PMS-M
- K.Motion PMS-W
- K.Sight PMS-V

Körber Supply Chain Automation

Our impartial consultants will advise on, and help you select, the right automation solution for your organization. We have our own range of competitive products, but we are equally willing to procure and implement other products if they are better suited to your needs.

Körber Supply Chain
koerber-supplychain.com

Copyright © 2020 Körber AG or its affiliates.
All rights reserved.