

Fulfilment center



As general contractor for material flow technology and for efficient process control in the picking and shipping of a particularly heterogeneous range of articles, Körber has equipped the new logistics center of eBay Enterprise. The plant is designed for rapid order completion and future growth.

Customer

eBay enterprise brings together supply and demand, and simplified the business process for retailers and brands. The new building offers packaged goods capacity for more than 220,000 customer cartons. The 28,000 square meter location in Halle was developed by real estate group Goodman and is to be used primarily by leading retailers and brands as a warehousing, order picking, and shipping space for their items. The new system offers an interesting alternative for retailers and brands that want to grow in the lucrative German and European eCommerce market.

Features and benefits

- **Fast order completion**
- **Spaces and system layout are set up with options for further expansion to the warehouse and shipping center**
- **The entire project, from the start of construction to the first system go-live, was completed in only about 10 months**



Special features / benefits

In addition to the ergonomic design of the various workstations, a sophisticated solution was needed in order to transport the geometric spectrum of containers, carton sizes and bags on a traditional conveyor system, whereby several thousand units had to be processed per hour.

With the system installed at the Halle location for eBay Enterprise, there are no restrictions to product types in the logistics center.



Solution

The logistics hall is divided into two separate warehouse blocks with fire prevention technology, each about 4,250 square meters in size. The shelving systems are installed over a total of four levels. For supply and disposal, Körber installed a high-performance order picking and shipment conveyor system that covers all levels and connects the processing stations in goods receiving and shipment dispatch. Pallet shelving with 8,100 shelving spaces is installed over a space of about 4,000 square meters. The excess quantities, auxiliary and operating materials, and bulky goods are held in the warehouse area served by forklifts.

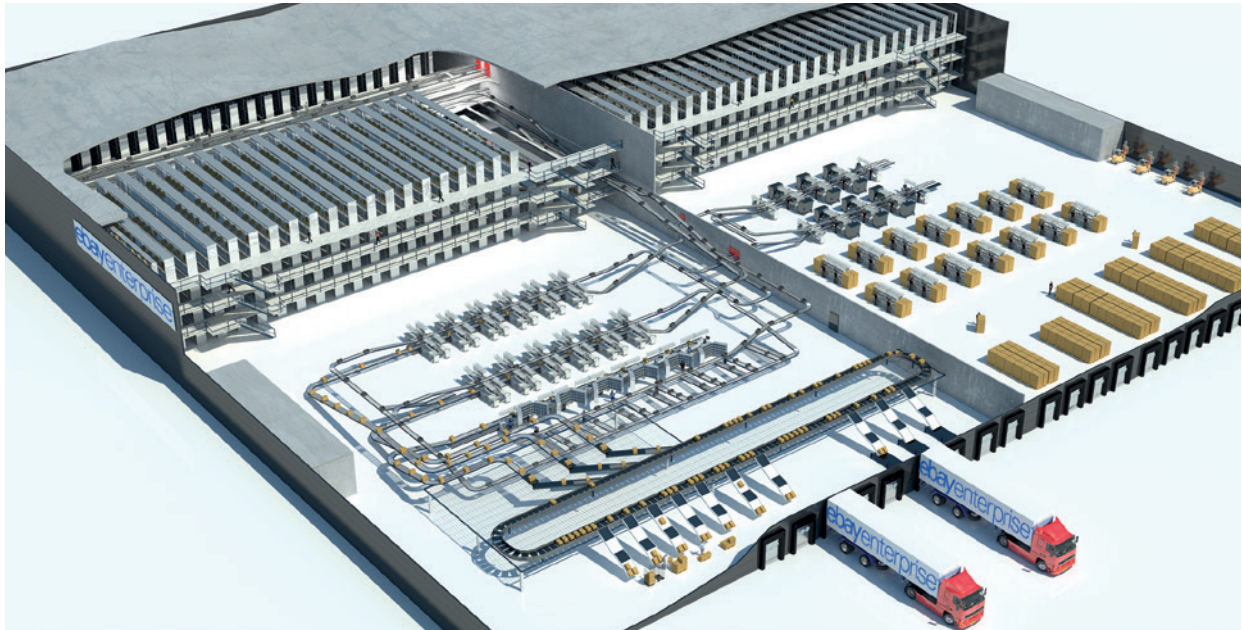
Boxes dispatched for shipment are fed into a dynamic shipment sorter by the conveyor system. With up to ten terminals and hourly throughput of several thousand pieces, it offers capacity for future growth. Bulky goods are packed and shipped in a special packaging area. From there, the goods are brought to the shipping area manually.

Integrated components

A total of 64 fully automated, thoroughly ergonomically designed picking stations are integrated into the shelving system. It supports the replenishment of supplies in the shelving levels and provides route-optimized efficient disposal of the properly picked goods. Goods receiving pallets are processed at 56 separate workstations. An additional 30 workstations in the receiving area are set up for repackaging and returned goods processing. The conveyor system then transports the relevant container goods to the relevant levels of the logistics system for storage. Hanging goods are manually stored with trolleys.

For shipment preparation of so-called single container orders, 48 PC-guided packaging stations were set up and incorporated into the conveyor systems with an intelligent empty container management. The conveyor system for order picking combines high-volume orders with several containers at almost 20 consolidation workstations. At these multi-container packaging workstations, the PC-guided shipment dispatching is done with put-to-light technology (PtL). In addition to the material flow management and system visualisation installed by Körber, the warehouse management module K.Motion PMS-W from Körber's process management system controls and manages the PtL processes.





Facts and figures

Industry

Retail

Central system tasks

Distribution and shipping conveyor system for a shelving container and carton system over 8,450 m² on four levels

Total usable space

26,500 m²

General contractor scope of delivery

- Multi-level
- Shelving system
- Conveyor system
- Sorter, platform
- Workstations

Workstations

- 64 order picker station over four levels
- 30 workstations for receiving / unpacking / returns
- 56 receiving pallet workstations
- 48 packaging workstations
- 18 packaging workstations
- 2 workstations for NG

Shipment sorter

- Feed sorter with 60 workstations
- 10 terminals
- 1 NG terminals
- Performance: 8500 units/h

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.

Container and carton conveyor systems

Complete conveyor system networking of receiving with 4 levels up to shipment sorters including 4 empty container circuits for preparing shipments in order picking

Transported material

Container	600 x 400 mm
Cartons	min. 210 x 140 x 80 mm max. 800 x 600 x 350 mm
Bags	min. 300 x 400 x 10 mm max. 420 x 500 x 10 mm

Throughput

2,850 containers / cartons/h

Pick by light

Put to light / pick by light controlling for the area packaging / order carton consolidation

Material flow controlling and systems visualization

- Körber controlling and visualisation on WIN-CC
- Körber put to light / pick by light
- Assignment of the shipping gates to the sorter terminal

Warehouse management

- K.Motion PMS-W
- eBay-WMS Manhattan

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