Case Study

Bringing Logistics to a New Level
Automated and shortened material flows

At a glance

Extended conveying technology connects three floors
When Fresenius Kabi decided to extend its German logistics centre and add a new floor to the existing building, it commissioned Kardex Mlog to install a new conveying system extending to all floors and areas. Through optimization of the conveying lines and greater automation of the material flows, the company significantly increased throughput.

Customer and task
1996, Fresenius Kabi commissioned Kardex Mlog to construct an automated high-bay warehouse in Friedberg. A surface area of 16,500 m² accommodates approx. 75,000 pallet storage spaces.

To facilitate further expansion, the company planned to connect several existing halls with a new picking area and by adding a new floor to the building.

Kardex Mlog was commissioned with extension of the conveying technology including the control system, adaptation of the existing visualisation system, and coupling of these systems with the customer’s warehouse management and material flow computer.

Solution
Following the addition of the new floor, the various halls were connected with the new picking area. Kardex Mlog also supplemented the existing plant with new conveying technology including two feed and discharge stations, continuous conveying technology, a distribution vehicle, and two vertical conveyors.

The vertical conveyors serve all floors of the building and each machine can transport approximately 110 pallets hourly from the ground floor to the second floor with a maximum lifting speed of 80 m/min. The newly installed distribution vehicle has a capacity of 120 pallets per hour at a speed of 100 m/min.

The conveying technology leading from the vertical conveyors was assembled by Kardex Mlog from scratch on the second floor. On the first floor, the existing distribution vehicle was connected to both transfer devices by extending the travel distance.

Seamless integration

Automated and shortened material flows

110 pallets per hour between 1st and 2nd floor

Turntables connect to high-bay warehouse
Scope of delivery

New conveying technology with 2 feed and discharge stations, a distribution vehicle, and 2 vertical conveyors

Distribution vehicle with maximum speed of 100 m/min and capacity of 120 pallets per hour.

2 vertical conveyors with maximum lifting speed of 80 m/min transport approximately 110 pallets per hour