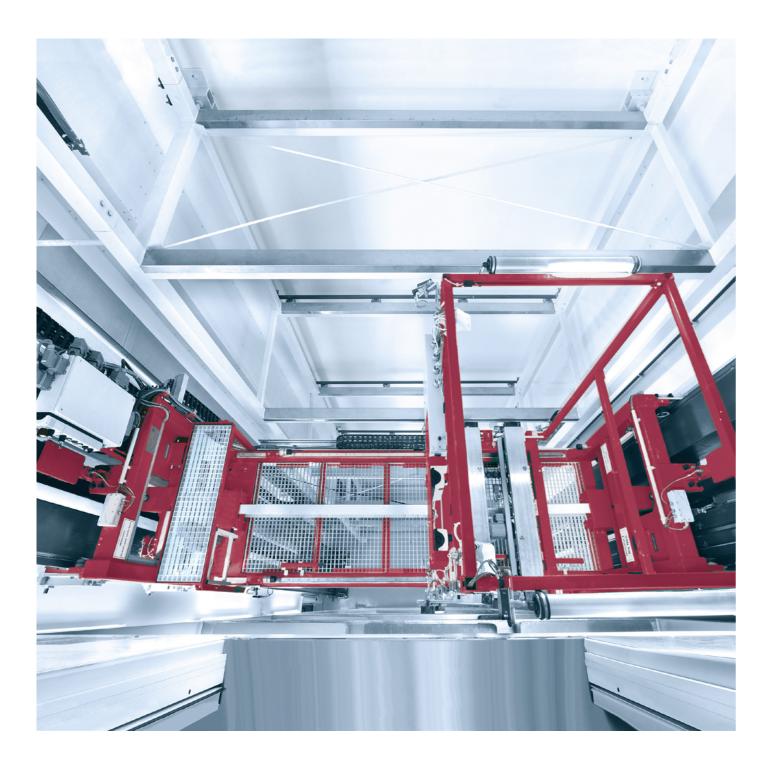
Case Study

Clean Air for Easy Breathing





Case at a glance

Cleanroom storage for atomizer production

At its Dortmund, Germany location, Boehringer Ingelheim microParts GmbH manufactures the patented Respimat Soft Inhaler under cleanroom conditions. As part of a production expansion to increase annual capacity to 20 million units, Kardex Mlog was commissioned to build a high-bay warehouse and a separate cleanroom warehouse.

Top performance on small footprint

Customer and challenge

Boehringer Ingelheim microParts GmbH specializes in the exact reproduction of microscopically small structures on an industrial scale. Using microsystems technology, the company manufactures the patented Respimat Soft Inhaler, whose micro nozzles generate a soft mist over a period of approximately 1.5 seconds.

The company also produces microchannel plates for medical diagnostics and analytics, as well as microspectrometers. As a result of rising demands, the Dortmund location had reached its capacity limits.

Solution

In the cleanroom area, a lifting beam ware-house of type Kardex MTower was installed with 56 pallet storage spaces. The goods are stored and retrieved with a vertically mobile lifting beam on which a distribution shuttle moves horizontally. The load unit is picked up by the telescopic fork mounted on the distribution vehicle. The load capacity is 500 kilograms. The capacity of the Kardex MTower with minimum footprint is approximately 20% higher than conventional storage with stacker cranes

The two-aisle high-bay warehouse provides storage space for approximately 1,800 pallets. It is operated with two 29 meter high stacker cranes of type Kardex MSingle B, each with a load capacity of 1,000 kg. The three-phase drives enable travel speeds of up to 100 meters/minute and a lift speed of 30 meters/minute. The conveying technology, which was manufactured by Kardex Mlog, connects all areas between goods receipt and discharge.

20% higher capacity in the cleanroom

56 storage spaces in the cleanroom 1,800 storage spaces in the high-bay warehouse



Scope of delivery



Fully automatic lifting beam warehouse of type Kardex MTower with 56 pallet storage spaces



Complete conveying technology between goods receipt and discharge



Fully automatic 2-aisle high-bay warehouse with two stacker cranes of type Kardex MSingle B (29 m high)