

Case Study

# 17 Years old and State of the Art







# Step-by-step refurbishment

## Customer and task

Mineral water from the Brandenburger Urstromquelle has been bottled in south Berlin since 1995. The warehouse, with its approx. 31,000 pallet storage spaces in seven aisles and on eleven levels, was also built in 1995. The high-bay warehouse was constructed by Kardex Mlog. After 17 years of operations, extensive refurbishment works were necessary in order to secure a spare parts supply over the long term and to maintain high plant availability. When the filling plant in Baruth was opened, it was state of the art. Step by step, the 14 original stacker cranes have been refurbished.

## Solution

The basic format of the plant has been retained. The twin-mast stacker cranes of type Kardex MTwin are 30-meters tall and are each equipped with two load pick-up implements for triple-deep storage. The telescopic forks have a load-bearing capacity of 1,000 kilograms each. This means that two pallets can be lifted simultaneously. Each pair of stacker cranes share an aisle and a crane rail. An impact control system prevents collisions.

During the refurbishment, all mechanical wear parts including the drive systems were replaced. In addition, the S5 controls were replaced by the S7 version. The Kardex Mlog specialists proceeded aisle by aisle. The devices were refurbished in pairs and returned to service so that, during the entire project, six of the seven aisles remained fully operational.

## Case at a glance

### Plant availability guaranteed

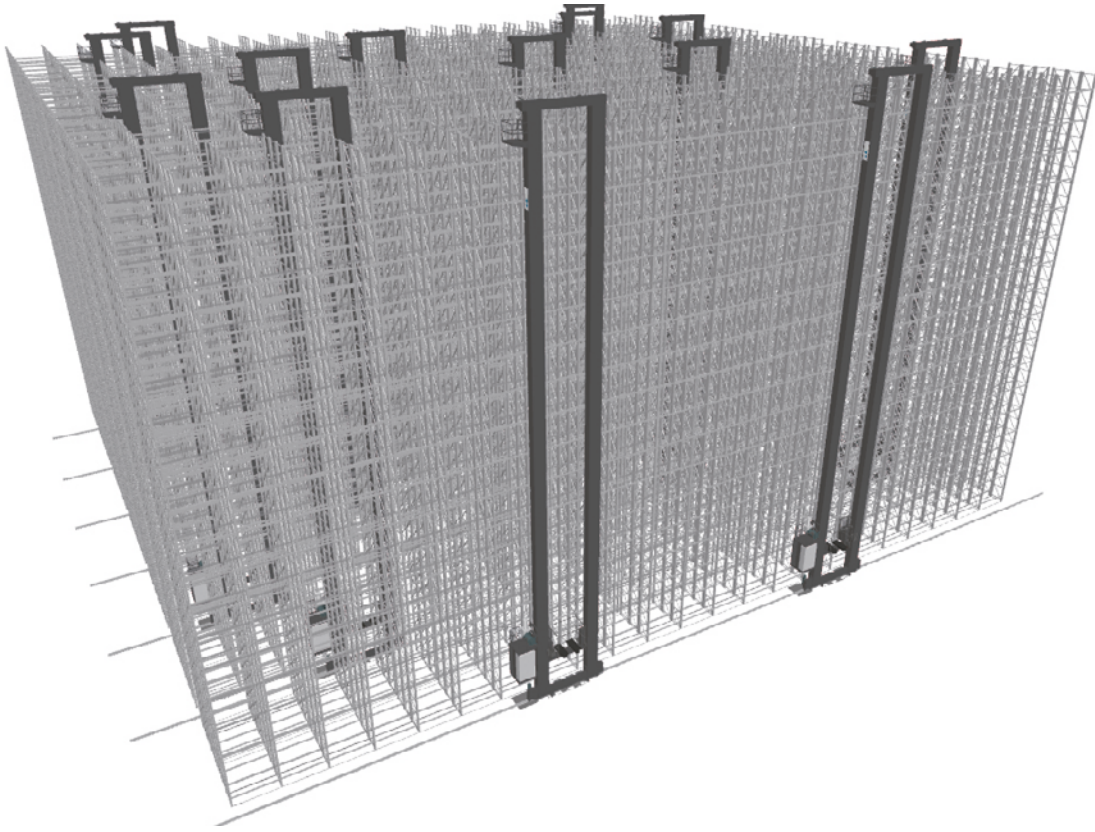
With the refurbishment of 14 stacker cranes, Kardex Mlog has transformed the warehouse of the Brandenburger Urstromquelle in Baruth, Germany into a state-of-the-art facility. The refurbishment concept ensured that plant availability was maintained even during the conversion work. The basic format of the plant has been retained. The step-by-step implementation of the measures took place over a period of six months.

Refurbished  
in **6 months**

6 of the 7 aisles  
**operational**  
during  
project

**14 stacker**  
cranes  
(30-meter high)





### Scope of delivery



Kardex Control Center including Kardex MVisu plant visualization



Replacement of all mechanical wear parts including the drive system



Update of all 14 programmable logic controllers from S5 to S7