

## MOHRENBRAUEREI DORNBIRN/AUSTRIA





**THE CUSTOMER**

The Mohrenbrauerei, headquartered in Dornbirn in western Austria, has been run since 1834 by the Huber family, now in its sixth generation.

Regular investments in the latest technology and professionally trained employees have ensured the success of the brewery right from the start. With a total market share of over 50% in the gastronomy and retail sectors, the oldest of the four breweries in Vorarlberg is also the market leader.

With around 120 employees, the Mohrenbrauerei achieved a turnover of 22.9 million euros and sold more than 18 million liters of beer as well as 3 million liters of wine, soft drinks and other beverages in 2016.



Mohrenbrauerei 2017: over 900 beverage items from beer and soft drinks to wine.

**BREWERY TRADITION SINCE 1834**

**STORAGE AUTOMATION SINCE 2017**

The logistics of the Mohrenbrauerei are based on a developed sales network, as well as 25 truck drivers with a Tablet, touring app and an often long-standing relationship of trust with their customers. The regular visits to the gastronomy and trading companies in the region has helped the Mohrenbrauerei mature as a full-service provider: In addition to beer, wine, water and soft drinks are also being delivered now.

This naturally increases the complexity in storage and order picking, with simultaneously increasing demands on the flexibility of the deliveries and their traceability to the raw materials or beverage producers.



August Huber, Mohrenbrauerei: "We have entrusted the project to a full-service provider – maybe also because we are one ourselves."

Against this backdrop, there is a clear need for action in terms of logistics, and all the more so, since the production section announced additional space requirements at the beginning of 2014 in order to fill larger batches in the future.

Space is a valuable commodity at the traditional brewery location in the Dornbirn city center, in the immediate vicinity of the town hall. Even the way up is limited to a height of 18 meters through the urban development plan.

"Our mission statement is: Innovative from tradition. You can't reinvent space, so the technical solution has to be all the more effective," says logistics manager August Huber, formulating the challenge for the project, which is taking around two years to plan.



Stacker crane with double-depth telescopic fork on the ground floor. The single-masted design allows reduced run-out and hence provides about 80 additional pallet spaces.



A vertical lift (left) connects the goods entry and exit on the ground floor, the order picking upstairs and the cellar for wines, 3,000-liter beer tanks and other slow-moving items. At the interface to the order picking area, the transfer car (right) docks perfectly to the gravity roller tracks, thanks to the lifting and tilting device. As with the stacker cranes, vertical lift and transfer car are equipped with the patented LTW belt technology.

**MATERIAL FLOW**

A maximum solution is first run through with the support of an external planning office. A clever mixed model emerges from the conflicting requirements of volume, performance, reserves, safety requirements and costs, through a combination of manual block storage and automatic high-bay warehouse.

Its two-storey structure with a seven and a nine-meter-high rack aisle is predetermined by the existing structure. Additional space is provided by the construction of a new order picking area on the flying roof of the adjacent truck dispatch hall.

The material flow is designed consistently from the perspective of delivery: The sequence of the provided pallets should correspond precisely to the truck routing plan, while still remaining flexible until the very last moment.

Pallets ordered placed as a double pack with the three items that have the highest turnover come directly from

the block warehouse by forklift truck. All other items run into the upper, multi-depth shuttle rack and, from there, as replenishment in the order picking. The ready-to-ship mixed pallets reach the outbound area via the intermediate buffer of the bottom high rack; if necessary, they can be filled up until the end.

It is necessary to integrate the complex conveyor system, including the vertical lift and transfer car, for the connection of the storeys and stations.

**THE IMPLEMENTATION**

As one of four providers, LTW has already distinguished itself during the tender phase with impressive layout proposals and performance data. What ultimately sets the LTW offering apart, in addition to the costs and a good reputation in the industry, is its range, from the fireproof gate to the software.

"We quickly realized that only a reliable full-service provider can handle this construction site during operation, in the middle of the area and during the peak season", explains August Huber.

"So the responsibility lies in a single hand – without a time-critical clarification of interfaces."

The strategy has proven itself: After nine months of construction, the new plant goes into operation in February 2017: right on schedule. August Huber describes it this way: "Our employees quickly realized the benefits of the new, paperless workflow. The levels of stress and errors have dropped significantly. Everything runs smoothly!"



LTW equips the forklift trucks at the outbound area with a camera for automatic label scanning, including WLAN connection to the warehouse management system.

## PROJECT OUTLINE

YEAR OF CONSTRUCTION 2017



### HIGH-BAY WAREHOUSE

- ▶ In-house construction
- ▶ Galvanized steel rack
- ▶ L x W x H: 40 x 13 x 7 or 9 m
- ▶ 2 rack aisles
- ▶ Approximately 1,000 pallet spaces
- ▶ Payload: 1,000 kg
- ▶ Temperature range:  
+5 °C to +35 °C



### STACKER CRANES

- ▶ 1 aisle-bound stacker crane on the ground floor  
Load handling device:  
double-depth telescopic fork
- ▶ 1 aisle-bound stacker crane on the upper floor  
Load handling device:  
multi-depth cross-shuttle



### CONVEYOR SYSTEM

- over 3 levels with 5 I-points incl.
- ▶ 1 transfer car
  - ▶ 1 vertical lift
  - ▶ Continuous conveyor technology



### SOFTWARE

- ▶ Material flow system including storing position management for the automatic storage area
- ▶ Interface to the superordinated warehouse management system