



CASE STUDY | MANUFACTURER/RAW MATERIALS | WOODEN RACK

OFFSETDRUCKEREI SCHWARZACH

AUSTRIA

THE FOLLOW-UP PROJECT

BECAUSE TRUST BREEDS LOYALTY

The customer: Offsetdruckerei Schwarzach – renowned supplier of packaging solutions for the international consumer goods industry. The task: To expand the logistics center built by LTW in 2011 by adding a high-bay warehouse ten years later.

Back in 2010, Offsetdruckerei Schwarzach planned a large expansion with LTW – the production capacity was going to be doubled. But that alone was not enough. The Schwarzach-based company also had strict environmental demands, which the new center met.

Ecology in continuous operation

When implementing the project, LTW took various measures to minimize the carbon footprint. The first was a geothermal energy concept using 8.7 kilometers of geothermal probes for heating and cooling the industrial complex. The second was the conscious choice of wood as a building material for

the high-bay warehouse. This all led to an impressive reduction in CO2 output of 880 tons. Another bonus was the extremely short construction period of just five months from the time the contract was awarded. Furthermore, the stacker cranes were able to recover the energy released by every downward movement of the lifting carriage by converting it into electricity that was then fed into the grid.

Record year for sales: expansion during ongoing operation

Even when planning the first intralogistics system, it was clear where the journey should go. The first warehouse was implemented in stages. Now, ten years later, the expansion follows, which had already been planned for at the time. Why? Because the production flows as well as the degree of automation can be significantly optimized once again, with shorter distances, the automatic supply of raw materials, and seamless traceability of the flows of goods.

Considering roughly 500 pallets are processed every day, the processes need to be efficient. Thanks to the addition of a new high-bay warehouse as well as the software, an even higher degree of automation has been achieved.



Offsetdruckerei Schwarzach GmbH

Hofsteigstraße 104
6858 Schwarzach, Austria
offset.at

Founded: 1913
Employees: ca. 370

Portfolio:

- Producer and refiner of fine cardboard packaging and labels
- Processes ca. 25,000 tons of cardboard and paper per year





Conveyor system with automatic contour control

The challenge

At the heart of every high-bay warehouse is the software. Converting from the old software to the new is a difficult task, with the main challenge being how to interconnect the existing interfaces to form a continuous material flow. The more complex the warehouse is, the harder it is to change the software.

Significant expertise is required here – as well as perseverance. In addition, there is the fact that the expansion must be carried out during ongoing operation – and in a record year for sales!



„A software replacement is like open heart surgery. Not only is it stressful, but it also takes a lot of time. But if you work together on tricky tasks until late at night and certain key people from LTW are available around the clock, then you know you are working

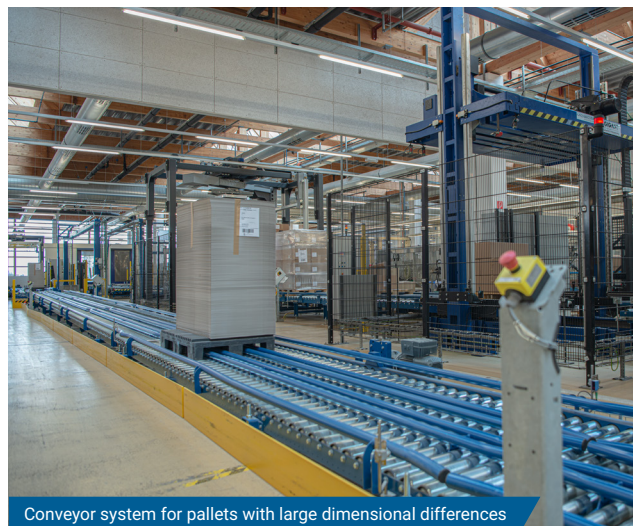
with the right partner.“ Johannes Knapp, CEO Offsetdruckerei Schwarzach

The implementation

The new high-bay warehouse provides space for 5,900 additional pallets, which can be stored or retrieved by two stacker cranes. But what is special about this?

Both Euro pallets and system pallets can be stored in the new high-bay warehouse, meaning that different transport units can be stored with the same lifting carriage.

A significant advantage here is that semi-finished goods no longer have to be stored in the production area but can con-



Conveyor system for pallets with large dimensional differences

veniently be kept in the high-bay warehouse. This not only saves space, but it is also always clear where the semi-finished goods are located.

Trust breeds loyalty

The Offsetdruckerei was happy with our service back then and is again today – as is evident by the follow-up project. Not only is the geographical proximity a major advantage, but also the fact that LTW employees who still know the system inside out from the first expansion are involved.

More Infos at:

[LTW.at/en/references/detail/offsetdruckerei](https://www.ltw.at/en/references/detail/offsetdruckerei)

OUTLINE OF THE PROJECT



HIGH-BAY WAREHOUSE (2011)

- Wooden rack in silo structure with steel inserts
- L x W x H: 56 x 23 x 30 m
- 3 rack lanes
- Multi-deep storage
- Approx. 10,500 pallet spaces
- Payload: 1,000 kg

STACKER CRANES

- 3 aisle-bound stacker cranes
- Driving speed: 180 m/min
- Lifting speed: 60 m/min
- Load handling device: LTW longitudinal shuttle
- Storage/retrieval capacity per stacker crane:
54 single or 33 double cycles/h

CONVEYOR SYSTEM

- Pallet conveyor connecting 3 levels with storage/retrieval stations incl. automatic contour control, strapping, wrapping, labelling
- Fully automatic cardboard box conveyor system starting at the production lines
- Automatic retrieval of the goods in the dispatch area

SOFTWARE

- LTW warehouse management system consisting of warehouse control and warehouse management units
- Visualisation
- Interface to customer's ERP system



HIGH-BAY WAREHOUSE (2022)

EXTANSION

- Rack supported storage system
- L x B x H: 74 x 16 x 36 m
- 2 rack lanes
- Double-deep storage
- Approx. 5,900 pallet spaces
- Payload: 1,200 kg
- Temperature range: +5 bis +35 °C

STACKER CRANES

- 2 aisle-bound stacker cranes
- 2 rail systems: 60 m, Typ S41
- Driving speed: 180 m/min
- Driving acceleration: 0,50 m/s²
- Hoisting speed: 90 m/min
- Hoisting acceleration: 0,60 m/s²

CONVEYOR SYSTEM

- Extension raw materials
- Extension finished materials
- 1 vertical lift
- 8 transfer cars
- Empty pallets portal

SOFTWARE

- Extension Warehouse management
- Extension Warehouse control