# Branch Reference Metal Industry

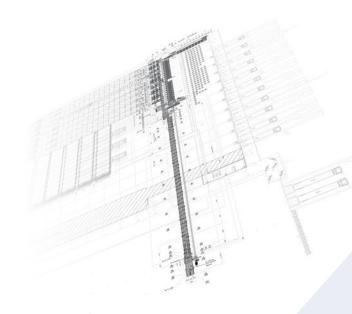


### The Customer

The family-run company Schletter, founded in 1983, is one of the leading manufacturers of innovative light metal products and European market and technology leader for intelligent solar assembly systems. Individual solutions made of aluminium profiles from the own press shop, powder coating for series production or the complete product development including design, engineering, packaging and logistics are provided directly by the plant in Kirchdorf/ Haag, located in Upper Bavaria. There are 20 subsidiaries throughout the world. Additionally, products are manufactured in the factories in the USA, South Africa and China.

### The Requirements

For the company Schletter GmbH - actively doing business around the globe - the objective consisted in replacing the manually operated warehouse by a fully-automated pallet high bay warehouse to considerably increase the goods-in and goods-out capacity. Beyond that, the goal was also to restructure the flow of material and to optimize the picking process in order to guarantee fast supply availability even at a high volume of orders.





### Klinkhammer Intralogistics GmbH

Wiesbadener Str. 11 · 90427 Nuremberg · Germany Phone +49 911 930 64 0 · Fax +49 911 930 64 50 info@klinkhammer.com · www.klinkhammer.com



#### The Solution

A 16.5 m high pallet high bay warehouse composed of 7 aisles and featuring 7 storage and retrieval cranes as well as 10 power picking stations for pallets is in the centre of the warehouse with a footprint of around 9,500 m<sup>2</sup>. The storage capacity totals to 9,000 pallet storage locations. Additionally, a single-aisle, automated container storage system was integrated which is connected to the goods receiving area and to other storage areas by means of conveyors. The different materials to be conveyed and loaded, ranging from euro-pallets and grid box pallets to containers, represented a major challenge. The control of conveyors and handling equipment is ensured by the material flow computer of Klinkhammer which transmits all relevant information about loading unit and transport order. 10 power picking stations and the "Goods-to-Man" principle made it possible to considerably increase the number of picks per staff member during order picking. Due to the high performance requirements, decision was made in favour of designing two conveyor roundabouts each with a capacity of 140 pallets/h. This way, the necessary supplies performance for the power picking stations is guaranteed. To cut down the change time to a minimum, two source pallets with direct access and two pallet locations for buffering are

always available per each picking work station. Two target pallets are allocated to each work station. This allows multiple orders to be picked.

#### Advantages for the Customer

An automated system replaces the manual processes at Schletter to quickly and reliably control complex processes. Now a pallet high bay warehouse, an automated small-parts warehouse and optimized order picking strategies ensure smoothly running processes, a high supply availability and transparency of the goods in stock.

## Data and Facts:

- 13.5 m 16.5 m high pallet high bay warehouse composed of seven aisles with 7 storage and retrieval cranes and 9,000 pallet storage locations, optimized and adjusted to the roof pitch
- 10 picking work stations for pallets
- 1 automated container storage system, 7,440 storage locations
- Visualization system
- Warehouse Management Software DC21 and material flow computer by Klinkhammer

Connection of the warehouse to the production on the rear side







Order picking

