

BEST PRACTICE

## **STÜKEN**

Complex and flexible production supply



SHUTTLE WAREHOUSE ABOVE THE CENTRAL LOGISTICS AREA

#### COMPLEX AND FLEXIBLE

### **STÜKEN PRODUCTION SUPPLY**

The company Hubert Stüken GmbH & Co. KG, or STÜKEN for short, is a global technology leader for deep-drawn metal components, with about 1,200 employees on three continents. Components from STÜKEN are integrated in household appliances and fittings, computers, cell phones, cars and many more.

The precision deep-drawn parts are produced in large production series on transfer presses and stamping machines and may pass through up to an average of ten different production steps until they are finished. Between these production steps and before despatch to the customers, the deep-drawn parts are transported and buffered within the factory.

To optimise internal logistics, the downstream processing procedures, as well as delivery and despatch, were separated with an automated small parts warehouse. An additional washing container buffer serves as a further interface between production and the logistics area. The parts that need to be cleaned after each processing step are temporarily stored in the washing container buffer, an AS/RS stacker

crane-operated warehouse with a sequencing function for full and empty wash tanks (up to 200 kgs) from and for production.

The Automated Guided Transport System (seven vehicles) has been supplied by psb as well. That system links the washing machines, production steps of the refining process and the manual or automatic handling of the parts. These automated yet flexible transport routes reduce logistics expenses, create space for further growth and simplify the technical processes.

The downstream Multi Access Warehouse with 75,000 storage locations has a special feature: the 3-aisle shuttle warehouse was built on a floor slab on the top floor. Thanks to this concept, the central storage pre-zone could be established underneath the ceiling of the logistics building. Thus, the warehouse and the entire logistics area could be realised on a very small footprint and the traffic routes on the floor of the building remain free for forklift trucks and AGV movement.

INFORMATION + VIDEO ON OUR WEBSITE



#### CUSTOMER

Hubert Stüken GmbH & Co. KG, Rinteln I GER

#### **SYSTEM**

3-aisle Multi Access Warehouse with 21 level-changing shuttles and centrally arranged LHU lifts, single-aisle AS/RS stacker crane warehouse for bins weighing up to 200 kgs, 7 Automated Guided Vehicles (AGV), conveyor technology at the building ceiling, palletising robots

#### CONTACT

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AS/RS stacker crane for bins with a weight of up to 200 kgs





3-aisle Multi Access Warehouse at the floor slab above the logistics area

In the warehouse the seven shuttles per aisle can change storage levels via a shuttle lift. Two container lifts per aisle are integrated in the centre of the warehouse, where bins are transported from the storage levels to the storage pre-zone and back. The pre-zone is directly connected to the central distribution carousel at the ceiling on the first floor and is thus linked to the automatic palletising/depalletising of cartons and plastic bins, labelling, carton closing, quality assurance and error processing.

For the automatic palletising/depalletising of cartons and plastic bins, psb has integrated an area gantry with a robot carriage. The supply and disposal of this area with pallets is also carried out by the AGV.

# CREATING YOUR INTRALOGISTICS.