



*Automated storage in facilities with long and mixed sized items is a challenge. The case study is an example of the great versatility of the HUBMASTER® system.*

This case study presents a customer, headquartered in Novi, Michigan, USA, who is a leading global supplier to the automotive industry with more than 32,000 employees at 120 locations in 20 countries.

In the Body & Chassis and Fluid Systems divisions in Germany,

this Customer offers solutions in the areas of body seals, fuel and brake pressure lines and anti-vibration systems. The customer was looking to build a new warehouse with a versatile a versatile storage solution, so that different products could be stored in a very small space with one single system in an uncomplicated, simple, secure, and cost-effective manner.

## ACHIEVEMENTS

### MULTI-AISLE MULTI-PURPOSE STACKER CRANE

The **HUBMASTER®** System was specially designed to operate in a mixed storage environment where a Cantilever and a Conventional Rack System were necessary. It possesses a maximum load capacity of 3.300 lbs [1,500 kg] and can operate safely at a height of 26 ft [8 m].

### FORK CARRIAGE

The versatility of the electrically adjustable fork width enables it to move long loads of up to 20 ft [6 m] long, as well as storing pallets with a single Stacker Crane. This offers a great operational efficiency and the optimization of aisle widths saving important storage space.

### CONSTRUCTION SAVINGS

The possibility to reduce the aisle widths has allowed the

construction of a smaller warehouse, thus providing important savings and a quick return on investment (ROI) to the customer.

### REDUCING THE RISK OF ACCIDENTS

The sensor technology delimits routes and manages the equipment's behavior in different zones, which prevents collisions and ensures optimal driving within the aisles. Due to the ease of use of the **HUBMASTER®**, accidents are prevented.

### FLEXIBLE STORAGE

The **HUBMASTER®** multi-aisle stacker crane system rolls on rails supported by the racking structure or, as in this case, it is supported by the steel columns that give support to the building structure. This enables a flexible warehouse design, since the system is not supported on the racks, which means that the warehouse can be rearranged easily without great effort.



## STORAGE SYSTEM

A high-density handling and storage system operating in 5.9 ft narrow aisles [1.81 m] with conventional and cantilever racks 26.2 ft [8 m] tall with a load capacity of 3,300 lbs [1,500 kg] per pallet.

## PROCESS OPTIMIZATION

The system recognizes the center of aisle and the movements are restricted to avoid collisions with adjacent racks.

## FORK CENTER ADJUSTMENT

The motorized fork center change function means that there is no significant loss of time due to complex pallet format changes.



## BENEFITS

### STOCK MAXIMIZATION

Maximization of the storage volume by reducing the aisle width, without compromising safety, all this thanks to the simple operation of the **HUBMASTER®** multi-aisle stacker crane which incorporates active safety systems to prevent accidents before they occur.

### EASE OF USE

Connected directly to the Power Source, the **HUBMASTER®** does not require batteries and it's designed to operate continuously 24 hours a day. There is also no license needed to operate the Hubmaster, and a brief instructional Operator training session is all that is needed to learn how to operate it.

### ASSISTED OPERATION

The System is assisted through sensors which control the position and speed of the machine and serve as a driving assistance to the operator, avoiding accidents and collisions.

### POSSIBILITY TO AUTOMATE THE SYSTEM

The **HUBMASTER®** System is also available for 100% automatic operation through software, which makes it possible to operate without personnel inside the freezer. The system stores and extracts the products in a coordinated manner with the requirements of the order preparation in connection with the customer's management software systems.

### HMWare™ SOFTWARE BY HUBMASTER

The System is assisted through can be integrated with the

**HUBMASTER®** Warehouse Management Software offering full control of the storage of the product, both in the production phase as a Work-in-Progress item, or as a finished product ready to ship. It also allows for the preparation of Customer Orders and Shipment Control.

### ENVIRONMENTALLY FRIENDLY

The System operates without batteries, is 100% electric, and it does not use hydraulic fluids has no need for hydraulic fluids, so its environmental impact on its life cycle is less than a traditional forklift.

### USED FOR LOADING VEHICLES

On the one hand, the **HUBMASTER®** has the function of working as a storage and retrieval device, on the other hand, it's also able to interact outside the Racking System, as a Lift Truck or AGV for loading and unloading incoming and outgoing trucks within the warehouse.

### INVESTMENT

Quick return on investment, up to 60% lower than investments in other conventional solutions, which leads to a huge reduction in operational costs per pallet.

### TECHNICAL SERVICE

Programmed Local Maintenance, Repair, and Emergency Technical Services are available 24/7 through Service Partners.

### SPARE PARTS

A spare part management program is available for immediate worldwide shipping of parts.

## THE HUBMASTER® ADVANTAGE

The **HUBMASTER®** is available in a range of configurations that meet the strictest requirements for optimizing storage space and safety, also available in a fully automatic operation mode. We also provide tailored solutions for special applications.

It is available in the following configurations:



Single sided



Side access



Dual aisle with



Cantilever front access

We offer **fully customized solutions on request** for each particular case

**Contact us today for a no-cost-no-obligation consultancy with one of our experts.**

