



Automated storage in cold storage facilities is a challenge due to the complexity of managing heavy loads in demanding environments at temperatures below zero for its personnel and the handling equipment. The case study is an example of the great versatility of the HUBMASTER® system.

OBJECTIVES OF THE CASE

SPACE OPTIMIZATION

This case study presents a customer who was experiencing a rapid growth and needed to increase the capacity of their existing cold store. The existing facility is an expensive site to run, which operates at -24°C (-10°F), so the increase of storage capacity represents a great competitive improvement.

IMPROVING WORKER SAFETY

The environmental conditions required repeating short working cycles for the employees. The customer wanted to have its lifting equipment always ready and available to ensure that the available working time is effective. Likewise, the customer wanted a system which is easy to use by all personnel, not necessarily qualified in the driving of lifting machines, which represent a high risk under such demanding conditions and limited space.

OPERATIONAL OPTIMIZATION

The customer needed a solution to replace its forklift fleet due to operational constraints with:

1. Diminished battery capacity at low temperatures.
2. Needing to constantly recharge Forklift batteries.
3. Struggling to cope with the high throughput requirements at peak times.

TOTAL CONTROL 24/7

The customer wanted to improve the control and traceability of the stored products to guarantee an effective FEFO (First Expires, First Out) operation according to date and production batch. Once the materials are stored, a location registration system was required to speed up their retrieval and prevents errors when they are required for order picking.



THE HUBMASTER® SOLUTION

A HUBMASTER SYSTEM® WITHOUT BATTERIES AND PREPARED FOR COLD TEMPS

The system is connected to the mains is adapted to work at very low temperatures, which allows for a 24/7 operation without repeating battery charge cycles or waiting times to heat up, and therefore remains always available for use.

MULTI-DEPTH STORAGE

Able to handle Storage of up to 7 Pallets deep in Push-Back Configuration and Heavy Loads of up to 2,500 kg (5,500 lbs)

AUTOMATICALLY ASSISTED OPERATION

The operator's instructions are monitored and assisted by the system's PLC, which provides a verification of the position, in terms of aisle, height, and pallet location. It also provides a verification for correct taking of the load and monitors the movements in order to avoid collisions with the adjacent shelves.

SPACE OPTIMIZATION

It handles loads safely without touching the floor and reduces the risk of collisions with the adjacent shelves, while allowing the work in very small spaces aisles starting at 1.75 m (69").

SUITABLE FOR ITS USE BY ALL STAFF

Easy-to-use Semi-Automatic System. No specific personnel training is needed to operate it. Also available as a full automatic storage and retrieval AS/RS system operated by software.

STORAGE AT HEIGHT

The system can reach heights of 22 m (72 ft) in single aisle configurations and 15 m (49 ft) in multi-aisle systems, and it is designed to change aisles in very narrow spaces.

STORAGE LOCATION ASSIST

Position tracking with the identification on screen of the current aisle, level, and pallet, for easy referecing by the operator. The location can be integrated in the **HMWare™** warehouse management software by **HUBMASTER®**



ADDITIONAL BENEFITS

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 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 Sytem operates without batteries, is 100% electric, and it does not use hydraulic fluids, so its environmental impact on its life cycle is less than a traditional forklift.

TAILORED DESIGNED

HUBMASTER® offers free consultation to better configure the system for the application. The System is exactly adapted to the particular needs of the project and is suitable for the handling of heavy loads on any type of pallet, either full perimeter or non-perimeter pallets. The loads can be directly onto the floor or onto conveyor systems, or other extraction methods from the cold storage room.

POSSIBILITY OF FINANCING THE EQUIPMENT

We offer tailor-made financing plans adapted to the specific needs of the customer. Equipment financing offers a quick return on investment from day one.

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:



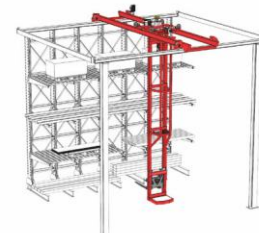
Single sided



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.



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