

Hyster develops warehouse space-saving solutions

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Warehouse space is becoming increasingly inadequate in the face of rising demand. One reason for this, is the continued growth of online shopping. Statista forecasts that revenues in B2B transactions alone will rise from over €40 billion in 2018 to around €46 billion this year. Space-saving solutions from Hyster can help to utilise every square meter of available space within the warehouse.

As early as the 1970s, the construction of high-bay warehouses led to the construction of special narrow-aisle lift trucks that enable companies to optimise their storage capacity. Today, many companies are forced by the ever-growing on-line market to increase their storage space with an unchanged floor plan.

Optimise available space

"In warehouses, a typical counterbalance truck may need a little more than 50 percent of the floor space to manoeuvre", says Jürgen Emmenegger, Warehouse System Specialist at Hyster Europe. "That's why the use of narrow-aisle trucks or higher rack warehouses can be the most cost-effective solution."

The Hyster® VNA and high lift order pickers used in supermarkets and retail stores are particularly well-suited for transporting and storing loads in narrow aisles.

Warehouse equipment solutions for efficient operation

Depending on the model, the powerful narrow aisle Hyster® C1.0-1.5 truck series can lift loads to a maximum of 1,500 kg and has a lifting height of up to almost 17 meters. The trucks are also suitable for transporting products with unusual shapes and sizes. "For example, we offer a model that is specially configured to handle long and bulky loads," says Emmenegger. "We've equipped the narrow aisle truck with a longer fork, which can even carry awkward loads two meters in length."

The best example of how Hyster develops space-saving logistics solutions is the use of narrow aisle trucks in the semi-automated high-bay warehouse of a textile logistics company. At the heart of the operation are four reliable Hyster® C1.3 narrow-aisle trucks, which are guided to remain in their lane by using a sophisticated induction system. This makes it possible to reduce the sideways distance to the shelves to a minimum, saving space.

The smart design of the forks on the models in this series makes it one of the industry's most compact and robust, helping to stabilise the load. If the swivel fork is pushed out sideways, an integrated pantograph opens automatically, so that the truck can be manoeuvred even in the narrowest of aisles with maximum lateral play.

Store pallets at eye level

When storing and retrieving the pallets, the driver has an optimal view, being at the same height as the goods. This could reduce damage and increase efficiency over solutions where the driver is working below the load.

The Hyster® CANbus communication system and temperature control systems minimise the need for maintenance, using powerful and reliable encapsulated three-phase motors. Efficient energy management also ensures a long service life and low operating costs. The Hyster® narrow aisle trucks, as well as Hyster® reach trucks, are produced at the Italian factory in Masate near Milan.

Reach truck for confined spaces

The Hyster® reach truck with tilting mast was originally designed for retail applications and is now used by many businesses in e-commerce storage. With a lifting height of up to 7.5 meters, small chassis and a lifting capacity up to 1,400 kg, the truck is ideal for operation in confined spaces. The models R1.0E, R1.2E and R1.4E are equipped with a tilting mast, so that the operator does not have to reach out as far when stacking and picking pallets from racking.

The Hyster® Reach Trucks with the tilting mast are equipped with the same high-quality operator compartment as other Hyster Reach trucks, which provide excellent visibility through the mast and the overhead guard. However, they also have numerous ergonomic improvements that increase driver comfort. Various driver support options are available, such as the Hyster® Tracker Fleet Management System, and a power supply that can be individually adjusted to the requirement of the time and load of the task with the option of various battery sizes.

Cost effective solutions for storage in confined spaces

"We have developed the compact S1.0E-1.2E series of pedestrian stackers, especially for companies that need a truck with good manoeuvrability in confined spaces," says Emmenegger. "With a lifting capacity of up to 1,200 kg, these reach trucks are suitable for everyday warehouse operations in less intensive applications

with a very good price-performance ratio."

IT-supported planning for optimal goods logistics

The prerequisite for making the best possible use of available space in a warehouse is efficient planning. To facilitate this, Hyster has designed a simulation software tool, that can take space constraints into account and identifies solutions that still deliver the required throughput at peak times - all at a low total cost of ownership.

Source: MOLOKINI MARKETING LTD