

Automatic and
mobile rack systems

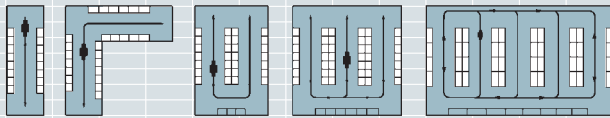


Automatic storage systems

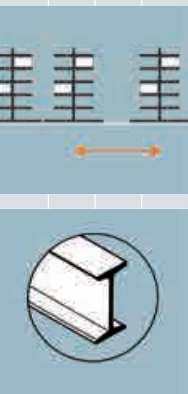
Storage optimisation with partial or full automation of storage and retrieval operations. The “goods-to-man” principle increases the order picking performance.

Thanks to a compact design and optimum spatial usage, space demands are minimized, which reduces the access times. Storage and retrieval machines (SRM) are capable of moving heavy loads and goods both with speed and flexibility.

The spectrum ranges from sorting, production and assembly buffer in the production process to shipping, parts and flow racking.



- Maximum throughput performance for picking orders
- Safe handling of the loading units
- Inventory visibility
- From manual to fully automatic control expandable at any time
- Changing aisles with an SRM with cornering technology

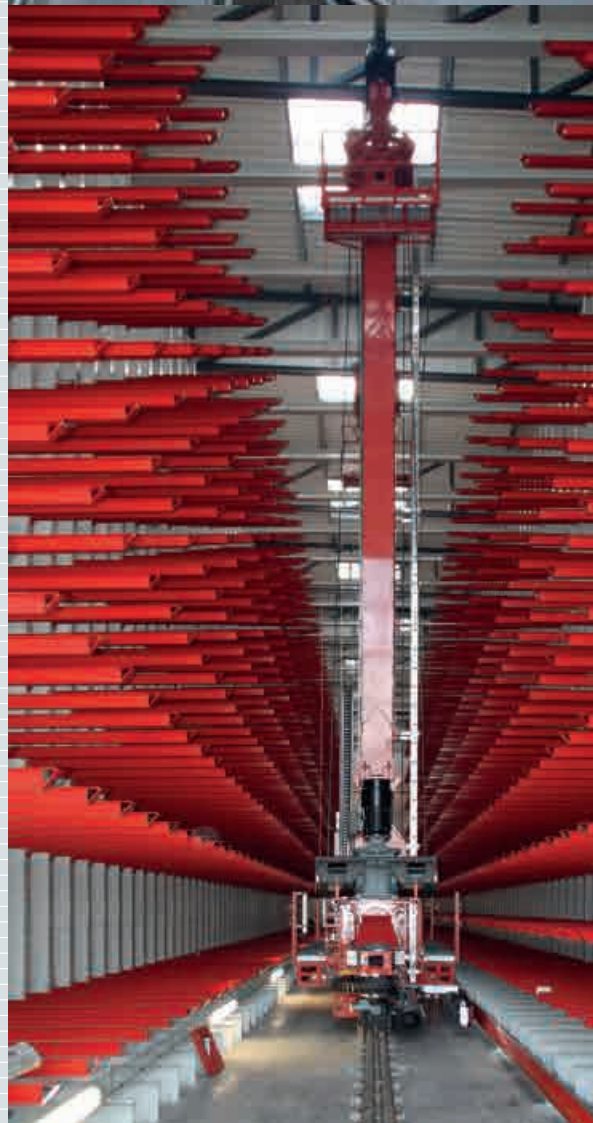


Mobile racking systems

In the industrial warehouse dynamic or mobile racking systems are modern solutions for a compact warehouse. Single racks are mounted on traversing carriages, which can be pushed together by means of rails and rollers.

For the stock storage and retrieval the required aisle is opened by an electronically controlled drive train. The result is a substantial decrease of transport routes and an increase in area of up to 100% compared to fixed racks.

- Compact storage on a small foot print
- Modern racking system for a wide range of applications
- High cost-efficiency and storage capacity thanks to optimal space utilization
- Effortless rail-wheel-system for quiet and durable operation
- Decrease of transport routes while simultaneously increasing the available area



OHRA Automatic and mobile rack systems



Automatic storage systems



Automatic storage systems

The technically designed interaction of automatic storage and retrieval machines (SRM) and robust racking systems is decisive for logistical processes in warehouses.

Narrow aisles, a high storage density, as well as the compact design of the automatic storage are essential elements to an efficiently operated warehouse.

Modular based automation

The decision for an automated warehouse is relevant not only for new buildings. Racking systems with manual controls can be converted at any time to semi or fully automated control.

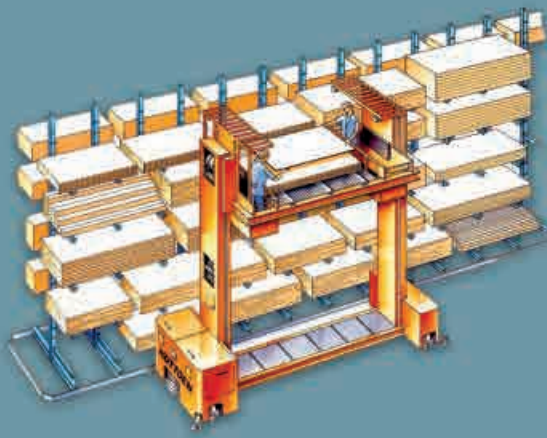
The key, though, is the in-house material flow and the increase of the order picking performance.

Integrated warehouse management software

Integrated logistics systems are the most sensible solution in a variety of industries, particularly in production, trading or distribution. In contrast to fully automated processes such as in the automotive sector there is usually a mix of full, partial automation and manual systems.

The entire logistics software consists of different modules that meet individual needs and are adapted to the existing infrastructure. Thus all necessary processes, from receiving to warehousing, internal transport to outgoing goods can be regulated and controlled.





Transfer station from merchandise receipt into the automated warehouse



Rail mounted rack riser trucks during a change of aisles



An automated warehouse system

Regardless of working hours, storage height and position, the automatic racking offers significant advantages compared to traditional storage systems, from manual to fully automatic operation including software interface.

The storage and retrieval machines (SRM) make a difference:

- High speed diagonal travel with a maximum height of up to 27 m high
- SRM load carrying spaces for the transport of several pallets
- Service several aisles with rack riser trucks through cornering technology
- Unmanned or semi-automatically with picking platforms
- Fully automatic operation with warehouse management software and featuring a control computer
- Modular packages can be retrofitted on request

Rack riser truck during a test drive in the empty warehouse



Whole packages or individual items can be commissioned



Before the handover to the storage and retrieval machine the materials are measured by means of an electronic contour check, and stock control is documented



Rail guided twin mast storage and retrieval machine for order picking in a timber trade business



The automated warehouse can be controlled fully automatically by one or several storage and retrieval machines

Mobile racking systems



Mobile rack system unladen. Electrically operated by pressing a button for each individual traversing carriage

Depending on the requirement and products to be warehoused almost all racking types such as cantilever or pallet racking styles can be converted to a mobile rack system.

The decisive advantage of this storage system is the gain in area of up to 100% while decreasing transport routes. By moving the carriage to a compact warehousing block only one aisle is open at any given time.

For the safety in the rack aisles of mobile racking systems for example, light barriers are mounted to the end and sides of the racks. These comply with the legal guidelines for personal protection devices.

Movable shelving systems are used for the compact storage of aluminium profiles,

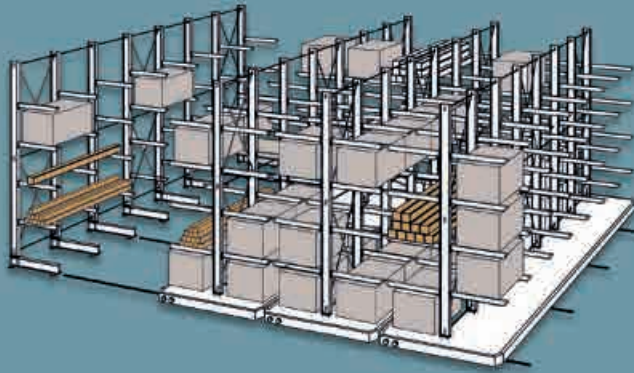
in backdrop and rigging warehouses of opera houses and theatres, in the timber trade, in archival warehouses and wherever a high storage density coincides with the need of direct access to all products.



Mobile racking system are the best storage system especially for the storage of different aluminium profiles

The corresponding racking system is mounted on torsion-resistant steel-traversing carriages and moved via rails.





Mobile racking systems

Everywhere, where a very compact storage is required due to a small footprint, movable racks are the best storage system.

The technical possibilities in the main warehouse, the goods in/out area are many and versatile.

- Up to 100% more storage capacity
- Handling manually with a hand crank or by electric drive
- Applicable for cantilever or pallet racking
- Traversing carriage up to 60 meters in length, load capacity up to 200 t
- Safety equipment and personal safety equipment in accordance with the respective valid directives
- Radio control optional
- Effortless rail wheel system made from special steel
- Can be retrofitted in existing warehouses

Electrical control of a traversing carriage



Traversing carriage with electric motor and drive wheel.



Electrical control modem for mobile rack systems



In the timber trade a variety of different wood products can be stored, both space-saving and compact in mobile rack systems. Nevertheless every pack is directly accessible.



A stage design warehouse of a state theatre. Thanks to the compact design several decentralized warehouses can be relocated into a central warehouse. Shorter travel times and faster conversion of stage designs are the result.