

AUTOSTORE

FLEXIBLE & EFFICIENT | HIGHEST FLEXIBILITY & OPTIMAL UTILIZATION OF WAREHOUSE SPACE



Efficient Storage and Order Picking

AutoStore is an efficient storage and order picking system for single items and small cases.

Robots with transport and lifting functionality operate the system. Equipped with a lift, they retrieve the required bins from the AutoStore grid and present them at the integrated picking stations, led by a controls and location management system.

The AutoStore system combines outstanding storage density with very high flexibility. It fits into existing buildings and makes optimal use of the available area.

References

Swisslog customers all around the world have already integrated AutoStore into their operations. Watch this technology in action by visiting www.swisslog.com/autostore



BENEFITS

- Provides better use of the available space than any other automated system
- Easy to integrate into existing buildings
- Future-proof through scalability of strictly modular design
- Minimal downtime thanks to unique redundancy, no single point of failure
- Favorable TCO (total cost of ownership) through energy efficiency and low maintenance costs
- Low investment through efficient processing at integrated goods-to-person workstations

Projects implemented with AutoStore:
ANTALIS | ASDA | COMPETEC | MEDLINE | MALO

PROVIDES BETTER USE OF THE AVAILABLE SPACE THAN ANY OTHER AUTOMATED SYSTEM

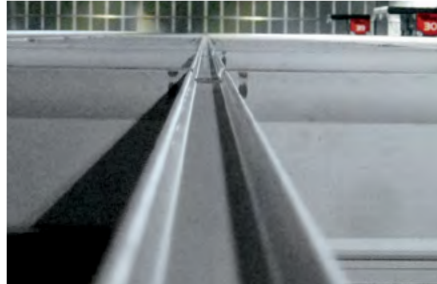
DESIGN & RANGE



There are almost unlimited ways to configure the grid for Autostore, and it can therefore be tailored to suit every customer's need.

Generally, bins containing faster-moving items are positioned at the top of the grid while slower moving items are stored in the lower sections.

COMPONENTS | GRID & BINS



The Grid

The grid is an aluminum structure forming rectangular cells. Each cell has room for a certain number of bins that are stored directly on top of each other. Different configurations of height and shape are possible.

The Bins

The bin is available in two different heights and two different materials. There are bins for general purposes and anti-static bins for the electronics industry.

COMPONENTS | ROBOTS & PORTS



The Robots

The robot has two sets of wheels that enable it to move four ways. All robots can reach any position on the grid. The robot is equipped with a lift and gripper for picking up, carrying and releasing bins. The robot communicates with the control system via RF and is recharged automatically.

The Ports

Ports can be installed at all sides of the grid. When a robot delivers a bin to a port, the port exchanges this bin with the previously used one, which is returned by the robot back to storage. Thus, new bins are delivered back-to-back, which results in fast processing.

FACTS

Height of grid	max. 5.4 m
Load	max. 30 kg
Robot travel speed	3.1 m/s
Robot lift speed	1.6 m/s
Robot acceleration	0.8 m/s ²
Throughput: bins typically retrieved, per robot	25 bins/h
Throughput: bins typically retrieved, per port	120 - 500 bins/h
Storage capacity (inventory), typically	5 000 - 100 000 bins/system
Inner measurement bins	601 mm x 401 mm x 200 mm/310 mm