

New Distribution Center adds AS/RS IKEA Wholesale Savannah, Georgia

References

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References

Retail

New Installations



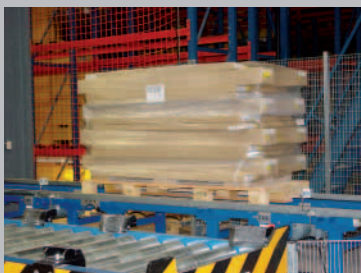
New AS/RS to Automate Material Handling

Initial Situation

viastore systems, Inc. was contracted by IKEA Wholesale to implement a new thirteen (13) aisle Automated Storage/Retrieval System (AS/RS) for their new distribution center in Savannah, Georgia.

IKEA's new distribution center is located four (4) miles from the port of Savannah, where the majority of their product is received. IKEA's goal was to receive and unload the container within 24 hours of arrival to port. Upon the arrival of the containers at the distribution center, they are processed at the receiving docks according to where it will be stored in the facility.

IKEA also needed a system that would be able to handle different pallet sizes: Euro pallets (800 x 1,200 mm) and extended IKEA pallets (800 x 2,000 mm).



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System Solution

viastore systems provided the AS/RS for the new distribution center. The entire system has been designed to provide a highly reliable process to efficiently fill orders for IKEA's customers. The new system saved operational costs while increasing efficiency. The system also provided high density double-deep storage, and a higher operational throughput than conventional storage.

Exceeded the 98% system availability

The Material Flow Control directs the in bound transportation system, including the high speed shuttle cars feeding the P & D stations. It also optimizes the material flow and S/R machine movement. A statistical history of this information is maintained to provide information for further system optimization. A graphical user display provides the operator with visibility to the system for system status and diagnostics.

The Result

The system provides IKEA with a highly reliable automated distribution center that has performed considerably higher throughputs than previous designs.

Scope of Supply:

Storage/Retrieval Machines
Mechanical/Electrical aisle hardware
Inbound/Outbound Conveyor System
High Speed Shuttle Cars
Material Flow Control (MFC) Software with visualization
Interface to host WMS

Essential Features:

AS/RS approximate size:

Length: 440 ft. (135.3 m)

Width: 328 ft. (100 m)

Height: 100 ft. (35.4 m)

(13) **viapal** S/R machines, each equipped with either a single or double deep shuttle.

System Configuration:

Euro Pallet Aisles - 8 Aisles double deep with (62,560) storage locations.

IKEA Pallet Aisles - 5 Aisles single deep with (20,700) storage locations.

Total storage locations available - (83,260).

Product stored: IKEA household goods for retail stores.

Storage is on Euro Pallets 800 mm X 1200 mm with 2 Pallet heights from 47.2 inches to 90.5 inches and storage on customized IKEA pallets that are 800 x 2000 mm.

Maximum capacity per pallet:

1,654 - 1,874 lbs.