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141 Feet High Warehouse

Battery Operated Rack Traversing Robot (RTR) System

A Complete Automatic Storage Retrieval System

Managing complex flows from raw material to final products between production and inventory control

141-Foot-High Storage

Given different BOMs (Bill of Materials)
we design and build systems to streamline the process of organizing and distributing a variety of raw materials, components, and sub-assemblies, each in varying quantities for the manufacture of numerous end products

Design

- Poleless design with easy access from multiple directions
- Light weight rack traversing robot (RTR)
- Overall dimensions 197’ x 33’ x 141’ feet (LWH)
- 400 frame pieces and 3000 pallets
- Total 3992 compartments
- Compartment size 4' x 4' x 6'3" (LWH)
- Smooth servo-driven acceleration and deceleration
- Easy maintenance requires no climbing on racks

Performance

- 660 pounds per load
- Charging time of 2 hours for 6 hours of nonstop operation
- Energy saving 20%+
- Average retrieving time 25 seconds
- Horizontal speed reaches 400 feet per minute
- Vertical speed reaches 66 feet per minute

Functionality

- Automatic return to charging station
- Sensor-controlled multi-RTR operation in the same aisle
- Regenerative braking during descent extends battery life
- Weigh and size scanning prior to storage
- Updates compatible with Enterprise Resource Planning (ERP)
- Alarms can be relayed via email or instant messaging
- Dozens of features protected under warranty
- Over 39 years of automation experience

Shuttle Racking System

Mass conveyor systems transport items to designated locations.
Electrical aisle cranes move swiftly to pick up and place items.
Items can be placed in sealed boxes or open bins for transport.