

Cross-Floor Solution

E-commerce & Retail | FMCG | Food | Electronics | Automotive | Cold Storage



Turbocharge Your Fulfillment

Solution for

Distribution Centers | Brownfield Retrofitting | Urban Fulfillment Centers

The integration of a Cross-floor Pallet AS/RS enables a centralized view of inventory through a single interface. Smart centralized inventory management automates seasonal SKU transfer and strategizes SKU placement based on changing market demands, with zero human intervention. During peak seasons, the AS/RS dynamically assigns tasks to floors with the most available space and the least congestion. Synchronized, multi-level order processing translates to accelerated fulfillment and operational harmony.

Your Vertically Integrated Smart Factory

Integrated features

- | | |
|---|---|
|  Automatic Replenishment |  Automatic Inventory Control |
|  Batch Management |  Docking with Conveyor Systems |
|  Dynamic Priority Scheduling |  FIFO Compliance |

Imagine building a high-capacity material-handling pathway to and from your production line, guaranteeing zero bottlenecks from supply to output. Deploying the ZS Robotics Pallet AS/RS enables seamless material inbound and high density storage within limited space on the first floor. With the integration of cross-floor lifters, finished products move off production lines and are transferred directly downstairs to lower-floor designated storage areas, eliminating production-side staging. Our WMS integrates seamlessly with any MES and supports dynamic feeding prioritization for any production line.

Featured Projects

Project Deployed in Aichi, Japan



Challenge:

The client was grappling with material flow bottlenecks in its legacy facility. They engaged us to design an automation solution for a new, multi-floor facility.

ZS Robotics Pallet AS/RS Solution:

6 pallet shuttles + 2 cross-floor lifters (23 m) + 4 internal lifters + ZSmart Platform

Total Storage Locations: 3,000+

Business Values:

- Accelerated Material Flow: Material handling cycle time reduced from 15 minutes to just 3 minutes.
- Storage Density: Increased by 350%
- Picking Accuracy: 99.99%
- Labor Efficiency: Increased 80%

Featured Projects

Project Deployed in Ningbo, China



Challenge:

The client's legacy operation suffered from a labor-intensive finished product staging process. ZS Robotics automated their new production facility.

ZS Robotics Pallet AS/RS Solution:

4 pallet shuttles + 2 cross-floor lifters (19 m) + 3 internal lifters

Total Storage Locations: 3,000+

Business Values:

- High Throughput Finished Product Inbound : 30 pallets/hour
- High Throughput Finished Product Outbound : 45 pallets/hour
- Storage Density: Increased by 150%
- Picking Accuracy: 99.99%
- Labor Efficiency: Increased 50%

ZS Robotics Cross-Floor Pallet AS/RS

The ZS Robotics Cross-floor Pallet AS/RS is a highly orchestrated, intelligent dense storage and material handling solution spanning multiple floors. Comprising a fleet of pallet shuttles, high-speed lifters, and conveyor system(s) at each level, the system is seamlessly integrated by the ZS Smart Platform, the brand's proprietary smart warehouse management platform.

 Storage Density: Increased by 300%

 Material Flow: 200% Faster

 Picking Accuracy: up to 99.99%

 Real-time Inventory Visualization

 Cross-floor Cluster Scheduling

 Automated Order Consolidation

