

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:39 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 39
Average Utilization: 75.0%
Throughput Increase: 34.2%
Labor Cost Reduction: 28.5%
ROI Period: 2.3 years

Warehouse Performance

Warehouse Location		Capacity Used	Inbound/Day	Outbound/Day	Picking Accuracy	Automation Level	Status
Distribution Center A	Chicago, IL	85.5%	2,683	2,437	95.6%	71.1%	Improvement Needed
Distribution Center B	Dallas, TX	75.3%	1,961	2,141	99.5%	64.6%	Improvement Needed
Distribution Center C	Atlanta, GA	45.1%	2,275	2,771	96.7%	88.7%	Optimized
Distribution Center D	Los Angeles, CA	33.5%	2,816	2,037	98.2%	64.0%	Improvement Needed
Distribution Center E	Newark, NJ	80.8%	2,174	3,105	98.7%	86.7%	Optimized

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Imple

ment voice-
picking
system to
improve
accuracy to
99.8%

- Upgra
de WMS
integration
for real-time
inventory
visibility

- Add au
tomated
sortation
system for
small
package
handling

- Imple
ment
predictive
analytics for
demand-
based
staffing

- Consid
er AS/RS
system for
high-
velocity
SKUs