

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:19 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 50
Average Utilization: 78.9%
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	42.5%	1,491	2,048	96.0%	79.4%	Improvement Needed
Distribution Center B	Dallas, TX	66.0%	1,765	3,408	96.9%	66.6%	Improvement Needed
Distribution Center C	Atlanta, GA	52.9%	2,677	3,515	96.0%	68.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	50.3%	2,323	3,226	96.7%	91.9%	Optimized
Distribution Center E	Newark, NJ	68.0%	2,021	3,579	99.1%	87.6%	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