

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:05:17 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 50
Average Utilization: 74.9%
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	84.9%	2,875	3,094	96.8%	60.7%	Improvement Needed
Distribution Center B	Dallas, TX	58.4%	2,385	3,398	97.6%	62.6%	Improvement Needed
Distribution Center C	Atlanta, GA	89.6%	1,909	3,975	99.0%	89.9%	Optimized
Distribution Center D	Los Angeles, CA	88.2%	1,137	1,693	98.7%	74.3%	Improvement Needed
Distribution Center E	Newark, NJ	56.4%	2,481	2,610	98.1%	87.1%	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