

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:06 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 32
Average Utilization: 69.4%
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	56.3%	2,002	3,530	99.5%	74.3%	Improvement Needed
Distribution Center B	Dallas, TX	91.9%	1,897	2,999	95.5%	74.9%	Improvement Needed
Distribution Center C	Atlanta, GA	53.9%	1,917	3,628	99.4%	67.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	46.0%	1,649	3,141	97.1%	62.6%	Improvement Needed
Distribution Center E	Newark, NJ	85.5%	2,127	3,819	97.4%	68.1%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput

by 20%

- Implement voice-picking system to improve accuracy to 99.8%

- Upgrade WMS integration for real-time inventory visibility

- Add automated sortation system for small package handling

- Implement predictive analytics for demand-based staffing

- Consider AS/RS system for high-velocity SKUs