

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:05:13 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 48
Average Utilization: 73.7%
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	49.1%	1,018	3,423	95.3%	74.7%	Improvement Needed
Distribution Center B	Dallas, TX	67.3%	2,078	3,284	98.0%	74.8%	Improvement Needed
Distribution Center C	Atlanta, GA	68.0%	1,256	3,151	97.6%	91.1%	Optimized
Distribution Center D	Los Angeles, CA	51.2%	1,657	3,704	95.3%	60.3%	Improvement Needed
Distribution Center E	Newark, NJ	74.3%	2,944	1,935	97.7%	67.6%	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