

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:02 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 32
Average Utilization: 71.8%
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	32.3%	2,143	3,291	96.4%	68.1%	Improvement Needed
Distribution Center B	Dallas, TX	58.7%	1,897	2,241	99.5%	71.3%	Improvement Needed
Distribution Center C	Atlanta, GA	41.8%	2,626	2,802	96.3%	73.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	45.1%	2,316	2,742	95.5%	80.3%	Optimized
Distribution Center E	Newark, NJ	78.9%	2,648	3,180	95.7%	65.9%	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