

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:55 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 57
Average Utilization: 75.2%
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	58.1%	2,440	2,202	96.2%	67.7%	Improvement Needed
Distribution Center B	Dallas, TX	43.5%	1,022	3,798	99.3%	66.6%	Improvement Needed
Distribution Center C	Atlanta, GA	52.5%	2,225	3,840	95.0%	75.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	90.6%	1,721	2,195	97.6%	92.7%	Optimized
Distribution Center E	Newark, NJ	37.5%	1,277	1,588	96.8%	73.0%	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