

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:00:43 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 61
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	38.4%	1,716	2,210	96.2%	71.3%	Improvement Needed
Distribution Center B	Dallas, TX	67.3%	1,734	3,772	98.1%	76.1%	Improvement Needed
Distribution Center C	Atlanta, GA	57.6%	2,261	2,771	98.3%	66.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	75.5%	1,397	3,026	95.8%	83.9%	Optimized
Distribution Center E	Newark, NJ	83.1%	2,127	3,386	99.1%	76.6%	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