

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:00:29 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 66
Average Utilization: 73.5%
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	40.6%	1,836	2,141	96.0%	73.0%	Improvement Needed
Distribution Center B	Dallas, TX	57.8%	1,778	2,206	97.8%	82.0%	Optimized
Distribution Center C	Atlanta, GA	90.9%	2,484	3,117	97.9%	62.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	95.3%	2,800	3,832	99.4%	77.6%	Improvement Needed
Distribution Center E	Newark, NJ	75.7%	2,052	3,032	96.7%	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