

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:17 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 35
Average Utilization: 75.1%
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	79.8%	1,667	1,763	96.5%	74.9%	Improvement Needed
Distribution Center B	Dallas, TX	60.8%	1,050	1,576	99.2%	80.3%	Optimized
Distribution Center C	Atlanta, GA	48.8%	1,449	2,963	98.2%	74.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	61.2%	2,128	2,612	97.6%	66.0%	Improvement Needed
Distribution Center E	Newark, NJ	42.6%	1,650	3,984	97.0%	79.6%	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