

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:40 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 75
Average Utilization: 84.0%
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	61.7%	1,748	3,522	97.7%	85.1%	Optimized
	Dallas, TX	79.2%	2,954	2,618	96.9%	77.9%	Improvement Needed
Distribution Center B	Atlanta, GA	34.4%	1,031	3,595	95.1%	89.0%	Optimized
	Los Angeles, CA	79.8%	1,595	1,947	97.6%	77.0%	Improvement Needed
Distribution Center C	Newark, NJ	78.4%	2,489	3,472	97.7%	90.7%	Optimized

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