

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:06 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 58
Average Utilization: 81.1%
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	44.6%	1,662	2,598	96.8%	92.9%	Optimized
	Dallas, TX	84.3%	2,742	2,575	96.5%	78.9%	Improvement Needed
Distribution Center B	Atlanta, GA	32.3%	1,842	1,809	96.0%	80.8%	Optimized
	Los Angeles, CA	123.1%	2,733	2,275	95.5%	66.3%	Improvement Needed
Distribution Center C	Newark, NJ	58.1%	2,895	2,372	97.6%	86.7%	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