

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:29 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 49
Average Utilization: 84.8%
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	46.2%	2,057	2,732	99.4%	83.0%	Optimized
	Dallas, TX	113.7%	2,402	2,169	99.4%	92.9%	Optimized
	Atlanta, GA	76.8%	1,364	2,322	99.2%	90.0%	Optimized
	Los Angeles, CA	56.2%	1,857	1,518	95.2%	91.4%	Optimized
	Newark, NJ	92.1%	1,672	3,468	97.7%	66.8%	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