

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:01:58 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 47
Average Utilization: 84.4%
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	50.3%	2,506	1,949	97.4%	93.1%	Optimized
	Dallas, TX	59.0%	2,925	3,845	98.2%	85.8%	Optimized
	Atlanta, GA	112.1%	2,564	2,111	96.7%	86.7%	Optimized
	Los Angeles, CA	52.5%	2,078	2,658	99.2%	94.5%	Optimized
	Newark, NJ	78.9%	1,685	1,848	98.5%	61.7%	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