

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:04:44 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 58
Average Utilization: 70.8%
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 Status	
Distribution Center A	Chicago, IL	62.8%	2,322	3,092	99.4%	93.7%	Optimized
	Dallas, TX	102.4%	1,490	2,618	97.2%	65.7%	Improvement Needed
Distribution Center B	Atlanta, GA	65.4%	1,097	1,921	98.4%	67.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	38.1%	1,480	1,556	97.9%	61.1%	Improvement Needed
Distribution Center E	Newark, NJ	48.8%	2,358	3,510	98.4%	65.8%	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