

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:08:36 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 44
Average Utilization: 79.6%
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	84.3%	1,871	1,613	99.3%	80.8%	Optimized
	Dallas, TX	77.9%	1,088	2,394	95.9%	77.6%	Improvement Needed
Distribution Center B	Atlanta, GA	58.9%	1,226	2,934	97.4%	61.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	31.9%	1,710	2,294	98.0%	87.9%	Optimized
Distribution Center E	Newark, NJ	59.2%	2,044	2,948	97.0%	90.5%	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