

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:02:03 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 36
Average Utilization: 78.0%
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	51.8%	1,781	3,229	99.3%	72.5%	Improvement Needed
Distribution Center B	Dallas, TX	36.2%	2,668	2,604	95.9%	63.5%	Improvement Needed
Distribution Center C	Atlanta, GA	36.7%	1,993	1,543	95.4%	84.5%	Optimized
Distribution Center D	Los Angeles, CA	74.6%	1,612	1,520	99.1%	82.7%	Optimized
Distribution Center E	Newark, NJ	51.9%	2,412	3,522	95.7%	86.9%	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