

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:17 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 39
Average Utilization: 67.0%
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	71.1%	2,099	2,215	97.8%	61.0%	Improvement Needed
Distribution Center B	Dallas, TX	64.7%	2,002	2,010	98.9%	71.6%	Improvement Needed
Distribution Center C	Atlanta, GA	69.0%	1,963	2,612	99.4%	64.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	49.8%	1,164	2,302	95.4%	63.9%	Improvement Needed
Distribution Center E	Newark, NJ	36.9%	1,267	2,720	99.0%	73.7%	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