

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:18 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 71
Average Utilization: 73.7%
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	54.7%	1,245	3,858	99.5%	73.0%	Improvement Needed
Distribution Center B	Dallas, TX	88.3%	2,769	2,753	95.1%	70.9%	Improvement Needed
Distribution Center C	Atlanta, GA	122.5%	2,871	3,108	99.1%	75.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	78.0%	1,055	3,526	99.5%	71.1%	Improvement Needed
Distribution Center E	Newark, NJ	60.5%	2,573	3,906	98.9%	77.9%	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