

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:07:49 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 31
Average Utilization: 71.5%
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	113.7%	2,302	2,418	95.9%	63.0%	Improvement Needed
Distribution Center B	Dallas, TX	92.9%	1,180	2,115	98.5%	67.1%	Improvement Needed
Distribution Center C	Atlanta, GA	60.1%	1,449	3,675	98.5%	75.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	82.5%	2,281	3,435	98.4%	77.2%	Improvement Needed
Distribution Center E	Newark, NJ	34.1%	2,180	3,913	95.6%	74.2%	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