

Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller
Date: 8/3/2025, 8:03:26 AM
Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 35
Average Utilization: 70.1%
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	44.3%	2,477	2,455	97.4%	73.9%	Improvement Needed
Distribution Center B	Dallas, TX	60.6%	1,101	3,055	96.9%	65.8%	Improvement Needed
Distribution Center C	Atlanta, GA	34.4%	2,913	3,613	98.2%	69.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	49.3%	1,776	3,128	96.0%	65.9%	Improvement Needed
Distribution Center E	Newark, NJ	81.0%	1,011	3,270	95.6%	75.2%	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