

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:04:19 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 50  
Average Utilization: 66.5%  
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	49.5%	2,297	3,042	95.8%	60.7%	Improvement Needed
Distribution Center B	Dallas, TX	79.1%	1,270	3,603	95.7%	60.8%	Improvement Needed
Distribution Center C	Atlanta, GA	78.9%	2,434	1,822	95.2%	68.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	85.8%	1,262	3,031	98.8%	67.2%	Improvement Needed
Distribution Center E	Newark, NJ	90.9%	2,022	3,025	95.3%	75.3%	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