

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:07:40 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 49  
Average Utilization: 74.3%  
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 Status	
Distribution Center A	Chicago, IL	67.2%	1,706	1,717	95.9%	91.1%	Optimized
	Dallas, TX	43.9%	1,610	3,567	99.4%	64.6%	Improvement Needed
Distribution Center B	Atlanta, GA	67.1%	1,701	3,515	96.3%	79.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	39.2%	1,898	2,550	99.4%	64.3%	Improvement Needed
Distribution Center E	Newark, NJ	53.8%	2,469	2,778	97.0%	72.0%	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