

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:05:04 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 37  
Average Utilization: 77.8%  
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	55.1%	1,554	3,280	95.7%	87.1%	Optimized
	Dallas, TX	75.0%	1,342	2,512	99.3%	69.0%	Improvement Needed
Distribution Center B	Atlanta, GA	83.4%	1,961	3,812	98.8%	63.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	66.4%	2,990	3,163	98.9%	83.7%	Optimized
Distribution Center E	Newark, NJ	77.3%	2,344	1,970	95.9%	85.8%	Optimized

## 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