

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:03:09 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 48  
Average Utilization: 83.3%  
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 Level	Status
Distribution Center A	Chicago, IL	68.1%	1,684	1,975	98.3%	74.9%	Improvement Needed
Distribution Center B	Dallas, TX	56.1%	2,331	1,773	97.9%	92.3%	Optimized
Distribution Center C	Atlanta, GA	58.1%	2,552	1,680	95.5%	92.2%	Optimized
Distribution Center D	Los Angeles, CA	107.1%	2,409	3,335	99.3%	90.4%	Optimized
Distribution Center E	Newark, NJ	58.3%	1,285	3,537	97.4%	66.9%	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