

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:00:32 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 49  
Average Utilization: 79.1%  
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	109.8%	2,349	2,275	96.5%	77.0%	Improvement Needed
Distribution Center B	Dallas, TX	50.0%	1,118	3,197	95.2%	82.3%	Optimized
Distribution Center C	Atlanta, GA	107.2%	1,885	3,854	96.6%	88.4%	Optimized
Distribution Center D	Los Angeles, CA	97.8%	2,614	2,633	97.3%	64.5%	Improvement Needed
Distribution Center E	Newark, NJ	87.5%	2,137	1,513	98.1%	83.4%	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