

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:01:07 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 52  
Average Utilization: 80.6%  
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	55.4%	2,312	3,690	95.3%	65.9%	Improvement Needed
Distribution Center B	Dallas, TX	75.2%	1,089	3,970	98.2%	80.1%	Optimized
Distribution Center C	Atlanta, GA	53.2%	1,117	3,230	95.3%	77.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	71.6%	2,727	3,479	97.9%	86.2%	Optimized
Distribution Center E	Newark, NJ	54.5%	2,701	1,595	99.4%	93.7%	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