

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:00:43 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 68  
Average Utilization: 79.3%  
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	78.8%	1,356	3,334	95.9%	66.0%	Improvement Needed
Distribution Center B	Dallas, TX	67.8%	2,248	2,098	95.0%	92.3%	Optimized
Distribution Center C	Atlanta, GA	75.8%	2,291	3,516	98.5%	65.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	63.5%	2,195	2,132	95.3%	82.9%	Optimized
Distribution Center E	Newark, NJ	94.3%	1,018	3,614	96.7%	90.0%	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