

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:06:19 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 35  
Average Utilization: 81.9%  
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	52.5%	1,115	3,376	98.4%	84.4%	Optimized
	Dallas, TX	67.1%	1,431	3,579	95.1%	75.6%	Improvement Needed
Distribution Center B	Atlanta, GA	39.4%	2,828	3,086	96.1%	90.8%	Optimized
Distribution Center C	Los Angeles, CA	84.9%	2,262	1,701	95.1%	83.9%	Optimized
Distribution Center D	Newark, NJ	45.4%	1,500	3,754	98.0%	74.6%	Improvement Needed
Distribution Center E							

## 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