

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:05:45 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 57  
Average Utilization: 78.2%  
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	71.8%	1,521	3,417	95.2%	86.9%	Optimized
	Dallas, TX	50.0%	1,456	3,984	96.7%	67.3%	Improvement Needed
Distribution Center B	Atlanta, GA	71.6%	2,952	3,704	98.7%	84.8%	Optimized
Distribution Center C	Los Angeles, CA	41.4%	1,554	2,727	98.2%	81.9%	Optimized
Distribution Center D	Newark, NJ	40.1%	2,479	3,969	95.5%	70.1%	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