

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:02:46 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 72  
Average Utilization: 82.4%  
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	98.0%	2,130	2,293	97.5%	78.8%	Improvement Needed
	Dallas, TX	53.2%	2,130	2,678	97.9%	80.8%	Optimized
	Atlanta, GA	66.7%	1,776	2,273	97.7%	81.0%	Optimized
	Los Angeles, CA	111.3%	1,753	3,065	98.7%	91.6%	Optimized
	Newark, NJ	62.1%	1,014	3,771	98.8%	79.8%	Improvement Needed

## 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