

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:06:36 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 65  
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	120.8%	1,550	3,315	95.2%	83.7%	Optimized
	Dallas, TX	67.3%	2,522	1,770	96.4%	90.4%	Optimized
Distribution Center B	Atlanta, GA	86.6%	2,884	2,802	98.5%	73.2%	Improvement Needed
Distribution Center C	Los Angeles, CA	89.3%	1,360	1,928	98.4%	62.8%	Improvement Needed
Distribution Center D	Newark, NJ	88.7%	1,576	1,850	96.0%	86.7%	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