

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:07:24 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 37  
Average Utilization: 87.7%  
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	120.0%	2,231	2,424	98.5%	82.9%	Optimized
	Dallas, TX	56.7%	2,268	2,128	98.8%	94.9%	Optimized
	Atlanta, GA	83.5%	1,450	2,149	98.6%	81.2%	Optimized
	Los Angeles, CA	86.6%	2,818	1,834	97.9%	88.8%	Optimized
	Newark, NJ	56.2%	1,712	1,824	96.4%	90.6%	Optimized
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