

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:07:52 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 37  
Average Utilization: 84.4%  
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	66.3%	1,823	2,713	97.8%	88.6%	Optimized
	Dallas, TX	38.5%	1,547	3,630	99.3%	88.4%	Optimized
	Atlanta, GA	55.4%	2,332	1,502	99.2%	91.4%	Optimized
	Los Angeles, CA	63.9%	2,251	2,131	98.1%	89.9%	Optimized
	Newark, NJ	72.2%	2,819	2,681	96.4%	63.6%	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