

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:01:54 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 45  
Average Utilization: 77.8%  
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	34.6%	2,108	3,483	96.2%	80.8%	Optimized
	Dallas, TX	59.0%	2,115	3,353	99.1%	74.3%	Improvement Needed
Distribution Center B	Atlanta, GA	44.4%	2,966	1,616	96.3%	82.5%	Optimized
Distribution Center C	Los Angeles, CA	73.6%	2,361	3,725	95.8%	62.5%	Improvement Needed
Distribution Center D	Newark, NJ	62.0%	2,661	2,608	96.8%	89.0%	Optimized
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