

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:08:40 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 56  
Average Utilization: 73.7%  
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	66.0%	2,020	2,904	96.2%	77.9%	Improvement Needed
Distribution Center B	Dallas, TX	79.2%	1,978	2,978	96.0%	75.1%	Improvement Needed
Distribution Center C	Atlanta, GA	129.5%	2,947	2,541	96.3%	76.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	90.5%	2,787	1,666	98.5%	76.3%	Improvement Needed
Distribution Center E	Newark, NJ	80.0%	1,345	2,040	99.1%	62.4%	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