

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:06:27 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 54  
Average Utilization: 73.9%  
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	69.8%	1,107	3,211	99.1%	71.1%	Improvement Needed
Distribution Center B	Dallas, TX	46.9%	2,188	2,921	97.0%	77.7%	Improvement Needed
Distribution Center C	Atlanta, GA	66.3%	2,527	1,988	99.4%	74.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	101.3%	2,106	2,250	98.8%	74.7%	Improvement Needed
Distribution Center E	Newark, NJ	45.3%	1,496	2,977	95.3%	72.1%	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