

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:04:36 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 79  
Average Utilization: 75.7%  
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	87.0%	1,427	2,161	95.8%	80.4%	Optimized
	Dallas, TX	61.0%	1,625	1,528	99.2%	75.2%	Improvement Needed
Distribution Center B	Atlanta, GA	65.4%	1,416	3,848	95.1%	86.0%	Optimized
	Los Angeles, CA	61.4%	1,535	3,687	99.4%	70.3%	Improvement Needed
Distribution Center C	Newark, NJ	75.9%	2,903	2,272	96.7%	66.7%	Improvement Needed

## Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for robotic arms

ment voice-  
picking  
system to  
improve  
accuracy to  
99.8%

- Upgra  
de WMS  
integration  
for real-time  
inventory  
visibility

- Add au  
tomated  
sortation  
system for  
small  
package  
handling

- Imple  
ment  
predictive  
analytics for  
demand-  
based  
staffing

- Consid  
er AS/RS  
system for  
high-  
velocity  
SKUs