

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:00:31 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 54  
Average Utilization: 75.1%  
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	80.6%	1,653	3,464	97.7%	76.7%	Improvement Needed
Distribution Center B	Dallas, TX	64.9%	2,499	2,316	98.7%	66.8%	Improvement Needed
Distribution Center C	Atlanta, GA	50.6%	1,146	3,043	99.2%	60.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	77.3%	1,502	3,611	96.3%	80.1%	Optimized
Distribution Center E	Newark, NJ	48.4%	2,936	3,992	97.4%	91.3%	Optimized

## 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