

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:01:34 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 61  
Average Utilization: 77.4%  
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	77.5%	2,807	3,065	98.2%	85.1%	Optimized
	Dallas, TX	60.9%	2,146	2,320	98.5%	68.4%	Improvement Needed
Distribution Center B	Atlanta, GA	110.9%	2,335	1,897	98.8%	72.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	72.4%	1,298	1,636	97.5%	85.1%	Optimized
Distribution Center E	Newark, NJ	68.8%	1,781	1,638	97.0%	75.5%	Improvement Needed

## Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Imple

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