

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:07:52 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 44  
Average Utilization: 75.8%  
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%	2,693	3,716	96.4%	68.4%	Improvement Needed
Distribution Center B	Dallas, TX	51.0%	1,143	1,787	96.8%	91.7%	Optimized
Distribution Center C	Atlanta, GA	56.7%	1,320	1,678	98.4%	82.2%	Optimized
Distribution Center D	Los Angeles, CA	79.4%	2,198	2,195	98.2%	70.1%	Improvement Needed
Distribution Center E	Newark, NJ	56.9%	2,439	3,285	96.8%	66.7%	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