

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:00:35 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 32  
Average Utilization: 73.7%  
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	87.1%	1,727	3,204	95.1%	72.5%	Improvement Needed
Distribution Center B	Dallas, TX	76.0%	1,160	3,279	99.2%	68.1%	Improvement Needed
Distribution Center C	Atlanta, GA	86.2%	2,341	2,113	96.5%	61.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	97.8%	1,591	3,568	97.1%	80.7%	Optimized
Distribution Center E	Newark, NJ	70.5%	1,606	3,856	99.1%	85.5%	Optimized

## 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