

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:08:53 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 76  
Average Utilization: 78.2%  
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	42.9%	2,576	1,634	98.2%	92.6%	Optimized
	Dallas, TX	106.1%	2,596	2,157	98.9%	93.4%	Optimized
Distribution Center B	Atlanta, GA	64.0%	1,391	2,359	96.5%	75.0%	Improvement Needed
Distribution Center C	Los Angeles, CA	70.8%	1,424	3,759	95.9%	66.8%	Improvement Needed
Distribution Center D	Newark, NJ	94.1%	1,483	1,568	98.6%	63.0%	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