

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:08:01 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 48  
Average Utilization: 77.6%  
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	73.4%	2,520	3,887	96.6%	72.3%	Improvement Needed
Distribution Center B	Dallas, TX	77.8%	2,050	2,878	95.0%	80.1%	Optimized
Distribution Center C	Atlanta, GA	66.5%	2,252	2,186	99.3%	76.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	71.4%	1,635	2,284	98.0%	66.6%	Improvement Needed
Distribution Center E	Newark, NJ	83.0%	1,122	3,180	96.4%	92.6%	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