

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:00:34 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 51  
Average Utilization: 81.2%  
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	42.1%	1,953	2,801	96.5%	89.1%	Optimized
	Dallas, TX	57.3%	1,061	3,849	97.3%	78.3%	Improvement Needed
Distribution Center B	Atlanta, GA	95.4%	2,323	1,927	98.8%	87.3%	Optimized
Distribution Center C	Los Angeles, CA	80.2%	2,159	2,400	96.3%	79.8%	Improvement Needed
Distribution Center D	Newark, NJ	94.2%	2,079	3,123	96.5%	71.7%	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