

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:06:14 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 18  
Average Utilization: 74.8%  
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	31.2%	1,032	1,741	98.8%	72.4%	Improvement Needed
Distribution Center B	Dallas, TX	116.6%	2,086	3,362	98.8%	82.0%	Optimized
Distribution Center C	Atlanta, GA	54.1%	1,815	3,678	99.2%	72.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	43.7%	1,385	2,974	95.7%	63.9%	Improvement Needed
Distribution Center E	Newark, NJ	93.3%	2,589	3,387	97.6%	83.5%	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