

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:02:31 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 57  
Average Utilization: 83.3%  
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	43.5%	1,470	1,886	99.2%	77.0%	Improvement Needed
Distribution Center B	Dallas, TX	62.5%	1,998	1,587	98.6%	94.6%	Optimized
Distribution Center C	Atlanta, GA	72.5%	2,970	2,712	96.0%	82.7%	Optimized
Distribution Center D	Los Angeles, CA	52.4%	1,759	3,342	95.3%	73.9%	Improvement Needed
Distribution Center E	Newark, NJ	70.9%	1,903	2,410	97.2%	88.2%	Optimized

## Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement voice-

picking  
system to  
improve  
accuracy to  
99.8%

- Upgrade WMS integration for real-time inventory visibility

- Add automated sortation system for small package handling

- Implement predictive analytics for demand-based staffing

- Consider AS/RS system for high-velocity SKUs