

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:08:50 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 49  
Average Utilization: 84.7%  
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	66.9%	2,354	2,855	95.5%	73.2%	Improvement Needed
Distribution Center B	Dallas, TX	105.1%	2,864	3,324	97.1%	87.2%	Optimized
Distribution Center C	Atlanta, GA	86.1%	2,773	2,621	97.2%	82.0%	Optimized
Distribution Center D	Los Angeles, CA	60.5%	1,962	2,247	97.7%	88.3%	Optimized
Distribution Center E	Newark, NJ	79.2%	1,924	2,639	96.5%	92.9%	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