

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:04:56 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 20  
Average Utilization: 71.7%  
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	76.3%	1,066	2,015	97.9%	62.1%	Improvement Needed
Distribution Center B	Dallas, TX	52.4%	2,626	2,544	99.1%	70.5%	Improvement Needed
Distribution Center C	Atlanta, GA	60.1%	2,251	1,676	98.4%	68.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	46.0%	1,331	2,017	99.0%	80.0%	Improvement Needed
Distribution Center E	Newark, NJ	38.4%	1,205	3,623	98.8%	76.9%	Improvement Needed

## 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