

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:07:30 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 48  
Average Utilization: 81.7%  
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	34.2%	2,871	3,971	98.3%	80.5%	Optimized
	Dallas, TX	59.2%	1,469	3,646	96.2%	75.6%	Improvement Needed
Distribution Center B	Atlanta, GA	59.4%	1,238	3,495	96.5%	90.5%	Optimized
	Los Angeles, CA	59.7%	2,156	3,262	95.9%	78.7%	Improvement Needed
Distribution Center C	Newark, NJ	71.6%	1,424	2,032	95.1%	83.1%	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