

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:01:39 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 41  
Average Utilization: 80.2%  
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	68.2%	2,181	3,253	97.6%	87.6%	Optimized
	Dallas, TX	56.0%	2,452	2,167	99.2%	69.4%	Improvement Needed
Distribution Center B	Atlanta, GA	114.6%	1,018	2,173	95.5%	89.0%	Optimized
Distribution Center C	Los Angeles, CA	91.8%	1,068	2,161	96.6%	70.1%	Improvement Needed
	Newark, NJ	50.0%	1,367	1,666	96.3%	85.1%	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