

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:01:07 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 39  
Average Utilization: 85.6%  
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	53.5%	1,374	3,025	99.2%	89.8%	Optimized
	Dallas, TX	41.5%	1,089	1,502	97.2%	76.4%	Improvement Needed
Distribution Center B	Atlanta, GA	60.0%	1,578	3,102	98.3%	93.4%	Optimized
Distribution Center C	Los Angeles, CA	61.9%	2,418	2,616	96.9%	75.6%	Improvement Needed
	Newark, NJ	95.0%	2,703	2,607	98.2%	93.1%	Optimized
Distribution Center D							
Distribution Center E							

## 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