

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:01:59 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 50  
Average Utilization: 79.6%  
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	82.0%	2,497	2,497	98.9%	83.9%	Optimized
	Dallas, TX	69.4%	2,650	3,072	97.3%	67.1%	Improvement Needed
Distribution Center B	Atlanta, GA	90.9%	2,653	2,359	95.8%	92.6%	Optimized
Distribution Center C	Los Angeles, CA	51.8%	2,099	1,956	97.6%	92.7%	Optimized
Distribution Center D	Newark, NJ	89.1%	1,788	2,737	96.7%	61.7%	Improvement Needed
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