

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:01:24 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 58  
Average Utilization: 79.5%  
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	58.5%	2,455	2,311	95.1%	76.8%	Improvement Needed
Distribution Center B	Dallas, TX	56.9%	2,803	3,901	97.5%	93.3%	Optimized
Distribution Center C	Atlanta, GA	105.4%	1,611	2,963	96.0%	79.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	104.0%	2,972	3,381	97.5%	79.3%	Improvement Needed
Distribution Center E	Newark, NJ	74.8%	1,101	3,973	95.9%	69.0%	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