

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:05:56 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 41  
Average Utilization: 70.5%  
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	78.9%	2,369	2,497	96.3%	74.5%	Improvement Needed
Distribution Center B	Dallas, TX	83.7%	1,215	3,589	97.1%	71.6%	Improvement Needed
Distribution Center C	Atlanta, GA	89.8%	1,027	2,547	97.7%	60.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	66.9%	1,804	3,092	99.0%	84.8%	Optimized
Distribution Center E	Newark, NJ	91.4%	2,681	1,917	96.0%	61.2%	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