

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:02:58 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 44  
Average Utilization: 70.8%  
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	69.0%	1,237	3,511	97.0%	76.7%	Improvement Needed
Distribution Center B	Dallas, TX	46.8%	1,802	3,649	98.6%	68.9%	Improvement Needed
Distribution Center C	Atlanta, GA	92.8%	2,973	2,290	99.4%	72.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	73.3%	1,544	1,901	95.5%	73.9%	Improvement Needed
Distribution Center E	Newark, NJ	68.0%	1,372	2,497	96.2%	61.9%	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