

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:00:55 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 36  
Average Utilization: 77.0%  
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	51.6%	1,639	2,514	96.1%	71.6%	Improvement Needed
Distribution Center B	Dallas, TX	93.4%	2,839	3,072	97.0%	77.9%	Improvement Needed
Distribution Center C	Atlanta, GA	62.3%	1,955	3,642	95.5%	67.6%	Improvement Needed
Distribution Center D	Los Angeles, CA	138.1%	2,293	3,669	96.0%	93.1%	Optimized
Distribution Center E	Newark, NJ	67.9%	2,968	2,904	97.4%	74.7%	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