

# 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: 52  
Average Utilization: 83.2%  
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	47.6%	1,131	3,312	96.2%	91.7%	Optimized
	Dallas, TX	70.2%	1,327	2,769	96.2%	65.6%	Improvement Needed
Distribution Center B	Atlanta, GA	74.3%	2,723	2,738	99.2%	90.2%	Optimized
Distribution Center C	Los Angeles, CA	73.7%	1,090	3,192	98.0%	93.1%	Optimized
Distribution Center D	Newark, NJ	104.7%	2,373	1,882	96.7%	75.5%	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