

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

Generated by: Vanguard Warehouse Controller  
Date: 8/3/2025, 8:01:03 AM  
Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 48  
Average Utilization: 74.6%  
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	44.7%	2,348	1,641	95.2%	88.4%	Optimized
	Dallas, TX	34.9%	1,888	3,967	96.0%	65.9%	Improvement Needed
Distribution Center B	Atlanta, GA	39.2%	2,913	2,584	96.7%	68.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	108.6%	2,195	2,706	96.0%	71.8%	Improvement Needed
Distribution Center E	Newark, NJ	47.9%	2,519	2,913	98.3%	79.1%	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