

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 68  
Average Utilization: 69.9%  
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 Status		
Distribution Center A	Chicago, IL	71.3%	2,148	3,791	95.8%	83.4%	Optimized	
	Dallas, TX	63.0%	2,388	2,027	95.2%	64.9%	Improvement Needed	
Distribution Center B		Atlanta, GA	122.6%	1,556	2,643	95.9%	72.4%	Improvement Needed
Distribution Center D		Los Angeles, CA	122.8%	1,491	1,992	97.4%	63.4%	Improvement Needed
Distribution Center E		Newark, NJ	87.8%	2,149	2,629	96.5%	65.1%	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