

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 52  
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 Status	
Distribution Center A	Chicago, IL	51.0%	2,732	1,787	95.9%	81.5%	Optimized
	Dallas, TX	56.0%	2,147	1,947	96.1%	78.4%	Improvement Needed
Distribution Center B		Atlanta, GA	83.2%	2,196	1,985	96.5%	Improvement Needed
Distribution Center D		Los Angeles, CA	120.2%	1,179	1,854	97.0%	Improvement Needed
Distribution Center E		Newark, NJ	49.6%	2,309	2,767	98.0%	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