

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 53  
Average Utilization: 71.7%  
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	67.8%	1,205	2,888	97.8%	71.9%	Improvement Needed
Distribution Center B	Dallas, TX	40.1%	2,150	1,603	97.9%	85.5%	Optimized
Distribution Center C	Atlanta, GA	81.4%	1,212	2,246	96.8%	66.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	37.0%	2,211	2,035	96.9%	60.5%	Improvement Needed
Distribution Center E	Newark, NJ	43.4%	2,048	2,227	99.3%	73.7%	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