

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 62  
Average Utilization: 71.5%  
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	86.9%	1,775	2,037	96.8%	70.5%	Improvement Needed
Distribution Center B	Dallas, TX	57.7%	2,015	3,408	98.7%	68.7%	Improvement Needed
Distribution Center C	Atlanta, GA	55.2%	2,113	3,496	96.2%	82.7%	Optimized
Distribution Center D	Los Angeles, CA	50.8%	1,040	2,979	96.8%	68.5%	Improvement Needed
Distribution Center E	Newark, NJ	53.5%	2,447	3,977	96.7%	67.1%	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