

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 47  
Average Utilization: 69.1%  
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	116.8%	1,147	3,215	96.8%	61.9%	Improvement Needed
Distribution Center B	Dallas, TX	77.3%	1,113	2,946	97.4%	64.0%	Improvement Needed
Distribution Center C	Atlanta, GA	52.6%	2,938	2,168	96.5%	74.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	73.6%	2,998	1,883	95.5%	83.9%	Optimized
Distribution Center E	Newark, NJ	73.3%	1,585	3,945	98.2%	61.4%	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