

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 48  
Average Utilization: 82.7%  
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	55.5%	1,118	1,610	97.0%	79.6%	Improvement Needed
Distribution Center B	Dallas, TX	83.9%	1,845	1,566	95.9%	84.9%	Optimized
Distribution Center C	Atlanta, GA	97.9%	2,062	1,557	96.4%	91.1%	Optimized
Distribution Center D	Los Angeles, CA	77.3%	2,150	3,681	98.5%	81.9%	Optimized
Distribution Center E	Newark, NJ	124.3%	2,413	2,371	98.0%	75.9%	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