

# 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: 74.3%  
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	86.6%	1,699	2,808	96.7%	79.9%	Improvement Needed
Distribution Center B	Dallas, TX	77.8%	2,594	3,608	98.5%	71.1%	Improvement Needed
Distribution Center C	Atlanta, GA	67.6%	2,556	2,495	97.5%	65.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	67.1%	2,581	3,019	99.2%	74.5%	Improvement Needed
Distribution Center E	Newark, NJ	66.0%	1,662	3,953	96.6%	80.7%	Optimized

## 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