

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 43  
Average Utilization: 73.9%  
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	117.4%	1,663	1,850	95.5%	75.1%	Improvement Needed
Distribution Center B	Dallas, TX	69.4%	1,491	3,345	97.8%	74.7%	Improvement Needed
Distribution Center C	Atlanta, GA	43.0%	2,469	3,670	99.3%	92.4%	Optimized
Distribution Center D	Los Angeles, CA	38.9%	2,103	2,218	96.1%	66.1%	Improvement Needed
Distribution Center E	Newark, NJ	56.8%	1,561	2,478	99.3%	61.1%	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