

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 34  
Average Utilization: 70.9%  
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	43.5%	2,339	3,245	99.3%	71.7%	Improvement Needed
Distribution Center B	Dallas, TX	57.3%	2,514	2,551	98.7%	64.0%	Improvement Needed
Distribution Center C	Atlanta, GA	57.4%	1,782	3,774	96.1%	72.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	38.6%	2,607	3,164	95.8%	67.8%	Improvement Needed
Distribution Center E	Newark, NJ	62.7%	1,067	3,839	97.7%	78.6%	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