

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 26  
Average Utilization: 68.3%  
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	47.4%	2,623	1,866	97.8%	61.1%	Improvement Needed
Distribution Center B	Dallas, TX	49.7%	2,909	2,351	98.1%	83.6%	Optimized
Distribution Center C	Atlanta, GA	94.2%	1,226	3,163	98.4%	63.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	73.3%	2,733	2,525	98.7%	71.0%	Improvement Needed
Distribution Center E	Newark, NJ	67.9%	2,733	2,812	99.1%	62.5%	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