

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 61  
Average Utilization: 73.2%  
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	58.8%	2,935	2,287	97.6%	72.2%	Improvement Needed
Distribution Center B	Dallas, TX	35.0%	2,909	2,053	97.8%	62.7%	Improvement Needed
Distribution Center C	Atlanta, GA	56.0%	1,001	3,645	98.6%	79.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	87.1%	2,311	3,155	97.3%	82.9%	Optimized
Distribution Center E	Newark, NJ	81.8%	1,324	2,165	95.1%	68.1%	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