

# 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: 73.3%  
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	79.1%	2,694	3,413	98.0%	74.7%	Improvement Needed
Distribution Center B	Dallas, TX	59.1%	1,377	1,523	97.4%	76.2%	Improvement Needed
Distribution Center C	Atlanta, GA	35.2%	1,617	2,125	97.6%	65.6%	Improvement Needed
Distribution Center D	Los Angeles, CA	106.2%	1,340	3,259	99.4%	62.4%	Improvement Needed
Distribution Center E	Newark, NJ	108.5%	1,365	2,908	95.6%	87.5%	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