

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 36  
Average Utilization: 71.7%  
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	72.8%	2,057	3,822	99.3%	66.2%	Improvement Needed
Distribution Center B	Dallas, TX	88.7%	1,728	1,659	98.2%	64.8%	Improvement Needed
Distribution Center C	Atlanta, GA	97.8%	2,281	2,646	97.8%	72.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	84.0%	1,440	1,689	97.8%	64.3%	Improvement Needed
Distribution Center E	Newark, NJ	44.8%	2,203	2,659	97.4%	90.7%	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