

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 38  
Average Utilization: 71.3%  
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	95.3%	2,946	1,882	97.9%	79.3%	Improvement Needed
Distribution Center B	Dallas, TX	34.4%	1,288	3,540	97.1%	68.0%	Improvement Needed
Distribution Center C	Atlanta, GA	38.2%	2,246	2,627	97.5%	61.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	56.1%	2,384	3,852	99.4%	71.0%	Improvement Needed
Distribution Center E	Newark, NJ	57.6%	1,305	3,272	99.4%	76.9%	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