

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 23  
Average Utilization: 73.0%  
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	86.4%	1,492	3,869	96.6%	61.4%	Improvement Needed
Distribution Center B	Dallas, TX	61.7%	2,069	3,944	99.4%	93.5%	Optimized
Distribution Center C	Atlanta, GA	113.5%	2,292	2,241	96.7%	62.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	66.9%	2,264	2,344	95.6%	73.1%	Improvement Needed
Distribution Center E	Newark, NJ	81.2%	2,401	3,004	98.2%	74.6%	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