

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 60  
Average Utilization: 74.8%  
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	96.0%	2,495	2,076	98.3%	70.6%	Improvement Needed
Distribution Center B	Dallas, TX	99.6%	2,623	3,426	97.4%	63.2%	Improvement Needed
Distribution Center C	Atlanta, GA	93.9%	1,695	1,855	98.0%	66.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	95.7%	1,134	2,442	96.1%	94.5%	Optimized
Distribution Center E	Newark, NJ	37.6%	1,461	2,745	96.8%	79.6%	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