

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 50  
Average Utilization: 73.5%  
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	55.4%	1,307	2,787	95.8%	76.0%	Improvement Needed
Distribution Center B	Dallas, TX	83.8%	1,559	3,566	98.7%	74.1%	Improvement Needed
Distribution Center C	Atlanta, GA	69.8%	1,550	2,354	97.4%	60.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	71.7%	2,114	3,484	97.9%	63.8%	Improvement Needed
Distribution Center E	Newark, NJ	61.8%	1,489	3,129	97.0%	93.1%	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