

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 47  
Average Utilization: 74.4%  
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	58.2%	1,159	3,618	98.5%	69.3%	Improvement Needed
Distribution Center B	Dallas, TX	101.7%	1,978	2,295	97.9%	73.4%	Improvement Needed
Distribution Center C	Atlanta, GA	81.9%	1,597	2,409	97.3%	69.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	79.1%	2,331	2,089	95.2%	65.7%	Improvement Needed
Distribution Center E	Newark, NJ	87.4%	1,773	3,448	98.5%	94.1%	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