

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 46  
Average Utilization: 71.5%  
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	57.5%	1,069	2,690	99.5%	63.0%	Improvement Needed
Distribution Center B	Dallas, TX	60.4%	2,699	3,694	99.0%	85.2%	Optimized
Distribution Center C	Atlanta, GA	72.1%	2,837	1,993	98.7%	66.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	113.2%	1,856	3,463	95.9%	71.9%	Improvement Needed
Distribution Center E	Newark, NJ	96.7%	1,862	2,879	96.9%	70.7%	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