

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 41  
Average Utilization: 72.9%  
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	110.5%	1,413	3,230	95.3%	77.5%	Improvement Needed
Distribution Center B	Dallas, TX	74.9%	2,012	2,605	96.8%	82.1%	Optimized
Distribution Center C	Atlanta, GA	73.6%	1,080	1,833	99.0%	75.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	104.2%	1,670	3,689	97.7%	63.1%	Improvement Needed
Distribution Center E	Newark, NJ	57.8%	1,439	1,512	97.4%	65.9%	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