

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 56  
Average Utilization: 69.0%  
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	102.0%	2,440	3,410	97.0%	60.3%	Improvement Needed
Distribution Center B	Dallas, TX	62.4%	2,223	1,945	97.6%	82.0%	Optimized
Distribution Center C	Atlanta, GA	94.3%	2,548	1,807	99.5%	65.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	90.5%	2,072	2,667	96.8%	71.3%	Improvement Needed
Distribution Center E	Newark, NJ	71.7%	2,531	2,128	96.4%	66.3%	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