

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 53  
Average Utilization: 71.9%  
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	46.2%	2,310	2,964	98.6%	63.5%	Improvement Needed
Distribution Center B	Dallas, TX	80.8%	1,811	1,700	95.1%	91.6%	Optimized
Distribution Center C	Atlanta, GA	88.2%	2,784	2,885	95.8%	68.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	37.9%	1,014	3,522	98.6%	73.6%	Improvement Needed
Distribution Center E	Newark, NJ	82.1%	1,404	2,105	96.6%	62.3%	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