

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 50  
Average Utilization: 81.7%  
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	39.7%	2,405	3,448	98.2%	94.9%	Optimized
	Dallas, TX	99.9%	2,203	2,686	95.1%	63.1%	Improvement Needed
Distribution Center B	Atlanta, GA	119.3%	2,559	3,953	98.3%	82.4%	Optimized
Distribution Center C	Los Angeles, CA	73.7%	2,591	2,434	96.6%	92.9%	Optimized
Distribution Center D	Newark, NJ	64.9%	2,004	1,735	98.8%	75.0%	Improvement Needed
Distribution Center E							

## 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