

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 48  
Average Utilization: 79.6%  
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	55.1%	1,227	2,592	99.1%	91.1%	Optimized
	Dallas, TX	44.1%	1,734	2,544	99.5%	64.6%	Improvement Needed
Distribution Center B	Atlanta, GA	55.0%	1,506	3,715	95.2%	92.1%	Optimized
Distribution Center C	Los Angeles, CA	69.0%	1,395	2,094	98.6%	83.2%	Optimized
Distribution Center D	Newark, NJ	85.0%	1,864	3,820	96.6%	67.0%	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