

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 35  
Average Utilization: 85.2%  
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	67.8%	1,418	2,449	96.3%	94.9%	Optimized
	Dallas, TX	50.0%	2,808	1,938	98.9%	70.1%	Improvement Needed
Distribution Center B	Atlanta, GA	116.8%	2,099	2,519	96.4%	94.6%	Optimized
Distribution Center C	Los Angeles, CA	46.5%	2,238	3,615	98.7%	72.3%	Improvement Needed
	Newark, NJ	63.1%	2,650	2,838	96.5%	94.1%	Optimized

## 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