

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 32  
Average Utilization: 86.0%  
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	58.0%	2,371	2,588	96.6%	91.7%	Optimized
	Dallas, TX	51.3%	2,309	3,966	95.3%	94.1%	Optimized
Distribution Center B	Atlanta, GA	35.0%	2,282	2,211	98.6%	74.9%	Improvement Needed
Distribution Center C	Los Angeles, CA	58.0%	1,268	3,794	96.0%	85.9%	Optimized
Distribution Center D	Newark, NJ	56.5%	2,977	2,982	99.2%	83.5%	Optimized
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