

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 40  
Average Utilization: 83.9%  
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	101.2%	1,760	2,285	96.7%	84.8%	Optimized
	Dallas, TX	49.5%	2,800	2,162	95.3%	93.2%	Optimized
	Atlanta, GA	49.5%	1,438	1,501	98.6%	83.3%	Optimized
	Los Angeles, CA	106.1%	2,176	2,854	98.1%	82.2%	Optimized
	Newark, NJ	116.0%	1,647	2,560	95.2%	76.0%	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