

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 56  
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	103.5%	1,366	3,870	97.4%	81.2%	Optimized
	Dallas, TX	56.4%	1,924	1,690	96.1%	92.0%	Optimized
	Atlanta, GA	48.3%	2,535	3,695	99.2%	81.8%	Optimized
	Los Angeles, CA	79.3%	2,693	2,853	97.3%	94.9%	Optimized
	Newark, NJ	52.7%	2,832	1,754	98.5%	69.4%	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