

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 75  
Average Utilization: 83.2%  
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	46.4%	2,654	3,168	95.2%	82.4%	Optimized
	Dallas, TX	70.1%	1,969	3,612	96.8%	90.2%	Optimized
	Atlanta, GA	89.3%	2,385	2,533	96.3%	90.9%	Optimized
	Los Angeles, CA	63.2%	1,543	2,687	98.9%	82.1%	Optimized
	Newark, NJ	134.3%	1,789	3,112	95.1%	70.4%	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