

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 53  
Average Utilization: 84.2%  
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	60.1%	2,038	1,749	96.9%	94.1%	Optimized
	Dallas, TX	54.4%	2,568	2,843	97.3%	82.1%	Optimized
	Atlanta, GA	54.5%	1,308	2,799	98.7%	64.1%	Improvement Needed
Distribution Center B	Los Angeles, CA	56.3%	1,643	1,705	97.7%	91.2%	Optimized
	Newark, NJ	68.2%	1,066	3,286	97.2%	89.7%	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