

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 46  
Average Utilization: 74.5%  
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	39.1%	2,344	3,549	99.1%	85.1%	Optimized
	Dallas, TX	44.4%	2,398	2,541	97.0%	75.7%	Improvement Needed
Distribution Center B	Atlanta, GA	55.1%	2,636	3,596	95.4%	78.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	59.6%	2,837	1,811	96.9%	67.1%	Improvement Needed
Distribution Center E	Newark, NJ	121.9%	2,750	2,901	97.9%	66.3%	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