

# 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: 70.5%  
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	58.6%	1,904	3,774	96.6%	83.7%	Optimized
	Dallas, TX	100.3%	2,903	2,310	98.7%	69.1%	Improvement Needed
Distribution Center B	Atlanta, GA	51.9%	1,501	1,656	97.7%	71.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	58.8%	2,129	3,312	96.3%	60.5%	Improvement Needed
Distribution Center E	Newark, NJ	87.0%	2,505	3,946	96.9%	67.4%	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