

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 60  
Average Utilization: 66.6%  
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	75.3%	2,534	3,493	95.8%	61.6%	Improvement Needed
Distribution Center B	Dallas, TX	47.9%	1,300	3,606	98.7%	80.6%	Optimized
Distribution Center C	Atlanta, GA	46.9%	1,453	3,541	98.4%	62.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	43.3%	1,567	3,223	98.3%	65.3%	Improvement Needed
Distribution Center E	Newark, NJ	43.3%	2,692	2,085	99.3%	62.5%	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