

# 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: 73.3%  
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	59.0%	1,960	3,332	95.2%	73.9%	Improvement Needed
Distribution Center B	Dallas, TX	94.2%	1,220	3,560	98.4%	82.2%	Optimized
Distribution Center C	Atlanta, GA	83.4%	1,432	2,896	97.8%	74.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	73.3%	2,116	3,252	96.1%	66.0%	Improvement Needed
Distribution Center E	Newark, NJ	73.5%	1,866	2,417	96.8%	70.2%	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