

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 45  
Average Utilization: 73.6%  
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	58.7%	2,579	1,595	98.2%	79.1%	Improvement Needed
Distribution Center B	Dallas, TX	112.7%	1,588	2,428	97.8%	66.4%	Improvement Needed
Distribution Center C	Atlanta, GA	85.4%	2,074	3,178	96.3%	76.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	60.1%	1,065	3,519	98.4%	62.0%	Improvement Needed
Distribution Center E	Newark, NJ	99.6%	1,593	1,762	98.8%	84.6%	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