

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 57  
Average Utilization: 70.6%  
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	61.8%	1,021	3,766	96.8%	64.6%	Improvement Needed
Distribution Center B	Dallas, TX	51.9%	1,049	2,983	96.0%	65.2%	Improvement Needed
Distribution Center C	Atlanta, GA	104.8%	1,146	2,688	97.4%	65.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	67.5%	1,380	3,141	95.8%	67.6%	Improvement Needed
Distribution Center E	Newark, NJ	70.0%	1,469	1,791	99.4%	90.2%	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