

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 48  
Average Utilization: 72.0%  
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	56.8%	1,870	3,362	95.9%	77.2%	Improvement Needed
Distribution Center B	Dallas, TX	68.2%	1,976	2,695	97.0%	68.1%	Improvement Needed
Distribution Center C	Atlanta, GA	71.4%	1,004	2,092	96.3%	66.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	35.0%	2,116	3,157	96.4%	62.1%	Improvement Needed
Distribution Center E	Newark, NJ	80.0%	1,291	3,494	97.1%	86.2%	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