

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 50  
Average Utilization: 75.2%  
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	38.8%	2,684	1,723	98.6%	64.6%	Improvement Needed
Distribution Center B	Dallas, TX	40.9%	1,378	2,745	95.6%	93.6%	Optimized
Distribution Center C	Atlanta, GA	96.7%	2,614	3,684	99.3%	72.6%	Improvement Needed
Distribution Center D	Los Angeles, CA	82.8%	2,371	3,796	99.5%	75.3%	Improvement Needed
Distribution Center E	Newark, NJ	63.0%	2,444	2,469	98.1%	69.8%	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