

# 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: 74.6%  
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	96.5%	2,430	3,428	98.9%	68.3%	Improvement Needed
Distribution Center B	Dallas, TX	48.0%	1,609	1,776	95.6%	72.9%	Improvement Needed
Distribution Center C	Atlanta, GA	41.0%	1,524	2,522	95.8%	68.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	65.4%	2,534	3,350	98.9%	85.8%	Optimized
Distribution Center E	Newark, NJ	79.7%	1,121	2,057	95.7%	78.2%	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