

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 23  
Average Utilization: 75.0%  
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	49.2%	2,817	3,181	97.8%	74.5%	Improvement Needed
Distribution Center B	Dallas, TX	43.7%	2,956	1,725	98.6%	76.5%	Improvement Needed
Distribution Center C	Atlanta, GA	76.8%	1,336	3,726	99.0%	90.3%	Optimized
Distribution Center D	Los Angeles, CA	57.2%	2,117	2,900	96.1%	73.2%	Improvement Needed
Distribution Center E	Newark, NJ	54.6%	2,279	2,820	99.0%	60.4%	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