

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 41  
Average Utilization: 69.6%  
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	66.3%	2,906	2,461	96.8%	71.5%	Improvement Needed
Distribution Center B	Dallas, TX	98.6%	1,900	1,934	96.9%	81.9%	Optimized
Distribution Center C	Atlanta, GA	61.1%	1,272	1,880	98.5%	60.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	73.7%	2,185	1,746	95.2%	71.0%	Improvement Needed
Distribution Center E	Newark, NJ	105.4%	1,560	1,818	95.9%	63.3%	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