

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 32  
Average Utilization: 71.5%  
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	40.2%	2,636	2,326	97.5%	67.3%	Improvement Needed
Distribution Center B	Dallas, TX	34.0%	2,043	3,680	96.4%	65.1%	Improvement Needed
Distribution Center C	Atlanta, GA	78.8%	1,293	3,451	96.8%	61.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	91.7%	1,380	2,928	98.2%	73.4%	Improvement Needed
Distribution Center E	Newark, NJ	91.9%	2,166	3,521	98.8%	90.1%	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