

# 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: 70.0%  
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	68.5%	2,866	2,913	96.4%	63.1%	Improvement Needed
Distribution Center B	Dallas, TX	133.9%	2,921	1,631	96.4%	61.5%	Improvement Needed
Distribution Center C	Atlanta, GA	50.4%	2,762	2,025	95.7%	71.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	80.8%	2,681	3,747	98.2%	71.9%	Improvement Needed
Distribution Center E	Newark, NJ	72.5%	1,191	2,242	97.0%	82.0%	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