

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 60  
Average Utilization: 72.4%  
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	59.9%	2,788	3,965	95.2%	70.0%	Improvement Needed
Distribution Center B	Dallas, TX	73.5%	1,591	2,495	95.8%	88.9%	Optimized
Distribution Center C	Atlanta, GA	53.2%	2,934	2,931	95.5%	67.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	57.8%	2,086	3,397	96.6%	67.1%	Improvement Needed
Distribution Center E	Newark, NJ	59.4%	1,370	2,000	96.9%	68.7%	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