

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 45  
Average Utilization: 75.6%  
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	34.6%	2,105	3,073	98.0%	69.7%	Improvement Needed
Distribution Center B	Dallas, TX	83.7%	1,626	2,190	98.0%	79.9%	Improvement Needed
Distribution Center C	Atlanta, GA	55.1%	2,031	3,235	98.7%	68.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	98.5%	1,405	2,986	96.8%	82.3%	Optimized
Distribution Center E	Newark, NJ	47.6%	1,846	2,390	96.2%	77.6%	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