

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 33  
Average Utilization: 75.1%  
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	69.8%	1,102	3,848	99.3%	63.6%	Improvement Needed
Distribution Center B	Dallas, TX	68.0%	2,608	3,197	98.2%	70.2%	Improvement Needed
Distribution Center C	Atlanta, GA	54.1%	2,985	2,282	97.6%	92.6%	Optimized
Distribution Center D	Los Angeles, CA	49.2%	2,977	3,883	97.6%	70.0%	Improvement Needed
Distribution Center E	Newark, NJ	71.2%	1,750	2,983	97.3%	79.2%	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