

# 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: 72.2%  
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	101.6%	1,051	2,620	98.8%	70.5%	Improvement Needed
Distribution Center B	Dallas, TX	108.9%	1,559	1,536	96.8%	66.2%	Improvement Needed
Distribution Center C	Atlanta, GA	86.3%	1,160	2,041	99.0%	77.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	52.2%	1,872	2,331	99.0%	85.1%	Optimized
Distribution Center E	Newark, NJ	103.7%	2,511	2,731	98.5%	61.2%	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