

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 50  
Average Utilization: 71.0%  
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	67.0%	2,034	2,826	97.8%	66.9%	Improvement Needed
Distribution Center B	Dallas, TX	39.0%	1,024	1,730	96.0%	81.6%	Optimized
Distribution Center C	Atlanta, GA	72.5%	1,247	1,513	95.9%	73.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	41.2%	2,724	2,931	97.5%	66.0%	Improvement Needed
Distribution Center E	Newark, NJ	56.7%	1,795	1,554	99.1%	67.0%	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