

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 44  
Average Utilization: 73.0%  
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	49.5%	2,362	3,429	95.2%	72.0%	Improvement Needed
Distribution Center B	Dallas, TX	74.9%	1,294	1,501	96.7%	83.0%	Optimized
Distribution Center C	Atlanta, GA	51.4%	2,831	1,947	98.3%	72.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	47.4%	2,859	2,476	95.7%	62.1%	Improvement Needed
Distribution Center E	Newark, NJ	77.9%	1,854	2,032	98.3%	75.8%	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