

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 63  
Average Utilization: 73.6%  
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	101.5%	1,057	2,607	99.5%	76.5%	Improvement Needed
Distribution Center B	Dallas, TX	37.4%	1,007	3,842	98.8%	84.8%	Optimized
Distribution Center C	Atlanta, GA	105.6%	2,058	2,296	97.9%	74.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	86.9%	2,944	1,679	99.0%	69.9%	Improvement Needed
Distribution Center E	Newark, NJ	98.6%	2,211	3,903	95.9%	61.8%	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