

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 29  
Average Utilization: 76.3%  
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	43.5%	2,424	3,643	96.9%	69.3%	Improvement Needed
Distribution Center B	Dallas, TX	55.0%	2,484	3,162	99.2%	78.2%	Improvement Needed
Distribution Center C	Atlanta, GA	58.5%	2,538	3,157	95.6%	74.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	39.2%	1,873	2,394	98.3%	90.5%	Optimized
Distribution Center E	Newark, NJ	70.2%	2,275	3,126	96.1%	68.5%	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