

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 61  
Average Utilization: 74.9%  
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	87.4%	1,389	2,009	99.5%	70.1%	Improvement Needed
Distribution Center B	Dallas, TX	39.5%	1,977	1,559	99.0%	61.7%	Improvement Needed
Distribution Center C	Atlanta, GA	101.4%	1,739	2,829	98.0%	74.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	38.7%	2,915	1,539	98.4%	89.8%	Optimized
Distribution Center E	Newark, NJ	89.6%	1,086	2,715	95.1%	78.4%	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