

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 47  
Average Utilization: 79.8%  
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	84.7%	1,348	2,771	97.3%	71.4%	Improvement Needed
Distribution Center B	Dallas, TX	70.3%	1,007	3,386	97.0%	93.9%	Optimized
Distribution Center C	Atlanta, GA	37.2%	1,779	2,510	98.2%	76.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	79.7%	1,795	3,871	99.1%	79.0%	Improvement Needed
Distribution Center E	Newark, NJ	66.0%	2,092	2,780	97.5%	78.6%	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