

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 62  
Average Utilization: 77.3%  
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	51.9%	2,969	2,700	99.3%	71.5%	Improvement Needed
Distribution Center B	Dallas, TX	33.7%	2,128	1,786	95.3%	92.1%	Optimized
Distribution Center C	Atlanta, GA	124.2%	1,448	3,745	98.2%	78.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	79.2%	2,517	3,993	96.4%	75.9%	Improvement Needed
Distribution Center E	Newark, NJ	36.4%	2,225	3,020	95.5%	69.1%	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