

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 31  
Average Utilization: 71.7%  
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	37.9%	2,373	3,813	98.6%	67.7%	Improvement Needed
Distribution Center B	Dallas, TX	57.2%	1,647	2,474	99.4%	68.2%	Improvement Needed
Distribution Center C	Atlanta, GA	81.3%	1,697	1,862	98.0%	71.6%	Improvement Needed
Distribution Center D	Los Angeles, CA	53.9%	2,362	2,417	98.0%	65.2%	Improvement Needed
Distribution Center E	Newark, NJ	68.9%	1,161	3,754	98.3%	85.7%	Optimized

## 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