

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 48  
Average Utilization: 88.2%  
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	62.8%	1,988	1,672	96.9%	77.9%	Improvement Needed
Distribution Center B	Dallas, TX	40.3%	1,370	3,555	95.0%	94.9%	Optimized
Distribution Center C	Atlanta, GA	56.8%	1,415	3,134	95.4%	85.3%	Optimized
Distribution Center D	Los Angeles, CA	83.4%	1,824	2,184	97.9%	91.7%	Optimized
Distribution Center E	Newark, NJ	54.1%	2,918	2,185	98.5%	91.3%	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