

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 45  
Average Utilization: 83.0%  
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	35.1%	1,585	2,191	97.3%	64.8%	Improvement Needed
Distribution Center B	Dallas, TX	50.9%	2,763	2,265	99.0%	89.8%	Optimized
Distribution Center C	Atlanta, GA	47.8%	1,427	3,499	97.1%	87.9%	Optimized
Distribution Center D	Los Angeles, CA	63.0%	1,155	2,945	98.5%	86.6%	Optimized
Distribution Center E	Newark, NJ	124.1%	1,299	1,553	98.4%	85.9%	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