

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 53  
Average Utilization: 81.1%  
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	57.8%	2,724	2,943	97.8%	73.4%	Improvement Needed
Distribution Center B	Dallas, TX	44.4%	2,012	1,551	95.9%	81.8%	Optimized
Distribution Center C	Atlanta, GA	124.0%	1,358	2,433	98.9%	94.8%	Optimized
Distribution Center D	Los Angeles, CA	50.2%	2,726	1,923	97.3%	67.0%	Improvement Needed
Distribution Center E	Newark, NJ	73.3%	1,962	3,247	99.4%	88.4%	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