

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 27  
Average Utilization: 83.6%  
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	57.9%	1,089	2,568	98.7%	78.4%	Improvement Needed
Distribution Center B	Dallas, TX	71.3%	1,394	3,880	95.9%	84.4%	Optimized
Distribution Center C	Atlanta, GA	81.1%	1,808	1,540	97.2%	72.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	65.5%	1,803	3,382	95.7%	90.6%	Optimized
Distribution Center E	Newark, NJ	109.3%	1,637	2,449	95.9%	91.9%	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