

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 51  
Average Utilization: 84.7%  
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	43.7%	2,699	1,892	95.5%	62.4%	Improvement Needed
Distribution Center B	Dallas, TX	47.1%	2,171	1,761	99.0%	92.6%	Optimized
Distribution Center C	Atlanta, GA	66.7%	1,568	2,470	96.0%	94.2%	Optimized
Distribution Center D	Los Angeles, CA	61.7%	2,604	1,614	97.9%	86.6%	Optimized
Distribution Center E	Newark, NJ	47.2%	1,811	3,069	97.1%	88.0%	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