

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 56  
Average Utilization: 83.4%  
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	97.4%	1,661	3,461	99.0%	64.1%	Improvement Needed
Distribution Center B	Dallas, TX	50.5%	2,402	3,495	99.4%	85.1%	Optimized
Distribution Center C	Atlanta, GA	36.6%	1,448	3,110	96.1%	91.6%	Optimized
Distribution Center D	Los Angeles, CA	51.1%	2,383	3,249	98.1%	84.6%	Optimized
Distribution Center E	Newark, NJ	74.0%	1,951	2,502	96.6%	91.6%	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