

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 57  
Average Utilization: 83.8%  
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	41.0%	2,444	3,006	97.2%	71.3%	Improvement Needed
Distribution Center B	Dallas, TX	86.3%	2,376	1,792	95.6%	87.3%	Optimized
Distribution Center C	Atlanta, GA	76.1%	1,934	2,642	97.4%	75.6%	Improvement Needed
Distribution Center D	Los Angeles, CA	82.4%	1,083	3,841	98.8%	93.2%	Optimized
Distribution Center E	Newark, NJ	94.4%	2,499	2,736	98.3%	91.4%	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