

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 52  
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	62.9%	2,266	3,373	99.0%	88.5%	Optimized
	Dallas, TX	61.9%	1,354	2,285	97.4%	74.9%	Improvement Needed
Distribution Center B	Atlanta, GA	84.3%	2,212	2,450	97.6%	88.9%	Optimized
Distribution Center C	Los Angeles, CA	59.6%	1,892	3,366	95.6%	70.5%	Improvement Needed
	Newark, NJ	46.6%	1,422	3,382	95.1%	94.0%	Optimized
Distribution Center D							
Distribution Center E							

## 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