

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 42  
Average Utilization: 84.6%  
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	97.4%	2,108	3,431	97.3%	94.5%	Optimized
	Dallas, TX	88.0%	2,709	1,519	98.3%	68.3%	Improvement Needed
Distribution Center B	Atlanta, GA	50.2%	1,152	1,508	97.6%	86.1%	Optimized
Distribution Center C	Los Angeles, CA	105.9%	1,651	2,177	95.6%	86.8%	Optimized
Distribution Center D	Newark, NJ	126.5%	1,482	3,341	95.6%	87.2%	Optimized
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