

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 65  
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	70.3%	2,903	2,357	97.1%	81.4%	Optimized
	Dallas, TX	46.3%	2,212	2,068	98.1%	90.2%	Optimized
	Atlanta, GA	48.0%	2,672	3,369	96.4%	85.8%	Optimized
	Los Angeles, CA	80.0%	1,413	2,370	95.3%	92.7%	Optimized
	Newark, NJ	51.4%	1,257	2,746	98.4%	72.7%	Improvement Needed

## 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