

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 63  
Average Utilization: 79.0%  
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	44.9%	2,750	3,233	95.9%	93.6%	Optimized
	Dallas, TX	101.4%	1,318	3,361	95.0%	84.4%	Optimized
	Atlanta, GA	92.9%	1,266	2,800	97.3%	91.0%	Optimized
	Los Angeles, CA	110.0%	2,689	3,909	99.5%	62.6%	Improvement Needed
	Newark, NJ	67.6%	2,700	3,209	96.2%	63.3%	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