

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 44  
Average Utilization: 80.3%  
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	42.7%	1,830	2,265	99.5%	84.0%	Optimized
	Dallas, TX	36.3%	2,562	2,674	96.1%	72.3%	Improvement Needed
Distribution Center B	Atlanta, GA	82.3%	1,957	3,399	98.1%	91.6%	Optimized
Distribution Center C	Los Angeles, CA	48.9%	1,305	2,246	99.1%	63.4%	Improvement Needed
	Newark, NJ	42.0%	1,612	3,297	95.2%	90.2%	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