

# 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: 85.7%  
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	74.7%	1,075	3,179	96.7%	94.6%	Optimized
	Dallas, TX	134.3%	1,452	3,485	96.0%	89.9%	Optimized
	Atlanta, GA	132.7%	2,379	2,729	98.1%	76.7%	Improvement Needed
Distribution Center B	Los Angeles, CA	55.1%	2,648	2,186	97.5%	91.6%	Optimized
	Newark, NJ	86.5%	2,032	2,417	96.6%	75.6%	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