

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 45  
Average Utilization: 84.7%  
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	121.0%	2,940	2,858	97.4%	78.6%	Improvement Needed
Distribution Center B	Dallas, TX	88.7%	2,282	2,303	97.1%	92.4%	Optimized
Distribution Center C	Atlanta, GA	122.3%	1,344	2,887	97.3%	64.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	89.5%	2,378	3,814	95.1%	94.5%	Optimized
Distribution Center E	Newark, NJ	96.7%	1,727	2,509	96.8%	94.0%	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