

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 43  
Average Utilization: 70.8%  
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	80.7%	2,700	2,697	96.7%	63.2%	Improvement Needed
Distribution Center B	Dallas, TX	105.1%	1,589	2,814	97.4%	63.5%	Improvement Needed
Distribution Center C	Atlanta, GA	55.9%	1,580	2,447	96.0%	76.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	72.1%	1,975	2,199	97.7%	69.4%	Improvement Needed
Distribution Center E	Newark, NJ	74.7%	2,937	3,673	95.3%	80.8%	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