

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 39  
Average Utilization: 72.9%  
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	45.6%	1,719	3,678	97.3%	74.4%	Improvement Needed
Distribution Center B	Dallas, TX	49.6%	2,013	3,166	95.7%	74.7%	Improvement Needed
Distribution Center C	Atlanta, GA	85.5%	1,424	2,397	96.0%	69.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	87.2%	1,720	2,895	95.4%	85.1%	Optimized
Distribution Center E	Newark, NJ	98.4%	1,858	2,039	97.2%	61.1%	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