

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 33  
Average Utilization: 73.1%  
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	45.3%	2,814	3,898	95.6%	68.0%	Improvement Needed
Distribution Center B	Dallas, TX	33.7%	2,668	3,330	96.0%	84.7%	Optimized
Distribution Center C	Atlanta, GA	94.1%	2,449	2,013	97.3%	70.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	100.6%	1,755	2,528	98.3%	72.6%	Improvement Needed
Distribution Center E	Newark, NJ	67.1%	2,973	3,754	98.4%	70.1%	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