

# 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: 77.6%  
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	74.6%	1,429	1,893	98.9%	74.2%	Improvement Needed
Distribution Center B	Dallas, TX	53.3%	1,325	3,198	95.8%	75.8%	Improvement Needed
Distribution Center C	Atlanta, GA	110.5%	2,896	2,767	97.5%	88.7%	Optimized
Distribution Center D	Los Angeles, CA	83.1%	2,533	3,125	96.9%	74.1%	Improvement Needed
Distribution Center E	Newark, NJ	63.8%	2,810	2,688	98.7%	74.9%	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