

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 38  
Average Utilization: 73.8%  
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	93.2%	2,293	2,784	95.6%	67.2%	Improvement Needed
Distribution Center B	Dallas, TX	47.8%	2,400	2,356	96.1%	82.2%	Optimized
Distribution Center C	Atlanta, GA	65.8%	2,738	2,774	99.0%	79.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	63.8%	2,937	2,682	97.5%	71.0%	Improvement Needed
Distribution Center E	Newark, NJ	72.4%	1,239	1,698	95.8%	68.8%	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