

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 55  
Average Utilization: 65.4%  
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	82.1%	1,244	2,283	99.5%	68.1%	Improvement Needed
Distribution Center B	Dallas, TX	47.4%	1,955	3,859	95.1%	72.6%	Improvement Needed
Distribution Center C	Atlanta, GA	115.2%	2,927	2,128	98.3%	61.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	72.3%	2,715	2,498	96.5%	64.4%	Improvement Needed
Distribution Center E	Newark, NJ	87.3%	2,479	2,028	98.7%	60.1%	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