

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 62  
Average Utilization: 72.3%  
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	67.9%	1,486	2,026	95.2%	61.0%	Improvement Needed
Distribution Center B	Dallas, TX	53.4%	2,916	2,149	99.1%	93.7%	Optimized
Distribution Center C	Atlanta, GA	54.5%	1,762	3,363	96.8%	64.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	52.7%	2,309	2,461	95.1%	77.7%	Improvement Needed
Distribution Center E	Newark, NJ	88.2%	2,636	2,798	95.1%	65.0%	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