

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 49  
Average Utilization: 71.1%  
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	87.2%	1,240	3,920	96.2%	66.3%	Improvement Needed
Distribution Center B	Dallas, TX	65.8%	2,703	2,522	97.6%	81.1%	Optimized
Distribution Center C	Atlanta, GA	108.4%	1,563	3,343	97.2%	72.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	80.7%	2,277	2,934	98.9%	65.3%	Improvement Needed
Distribution Center E	Newark, NJ	66.3%	1,278	2,818	97.9%	70.5%	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