

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 47  
Average Utilization: 76.5%  
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	49.6%	2,311	3,816	95.2%	76.0%	Improvement Needed
Distribution Center B	Dallas, TX	57.3%	1,632	3,842	97.7%	76.4%	Improvement Needed
Distribution Center C	Atlanta, GA	46.2%	1,819	2,780	97.1%	71.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	72.4%	1,369	3,755	96.9%	78.7%	Improvement Needed
Distribution Center E	Newark, NJ	102.4%	1,652	3,508	99.3%	80.4%	Optimized

## 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