

# 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: 78.0%  
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	60.8%	1,659	3,327	95.2%	73.3%	Improvement Needed
Distribution Center B	Dallas, TX	111.6%	1,291	2,337	96.0%	78.7%	Improvement Needed
Distribution Center C	Atlanta, GA	46.0%	1,822	2,168	98.7%	92.6%	Optimized
Distribution Center D	Los Angeles, CA	61.5%	2,715	3,866	99.2%	66.0%	Improvement Needed
Distribution Center E	Newark, NJ	90.4%	1,887	2,320	95.8%	79.2%	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