

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 37  
Average Utilization: 73.4%  
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	55.0%	2,765	2,405	98.7%	67.2%	Improvement Needed
Distribution Center B	Dallas, TX	82.0%	2,466	2,013	99.1%	77.1%	Improvement Needed
Distribution Center C	Atlanta, GA	71.2%	2,356	2,054	97.7%	70.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	89.9%	1,834	2,518	95.7%	91.3%	Optimized
Distribution Center E	Newark, NJ	96.7%	1,476	2,002	98.4%	61.4%	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