

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 34  
Average Utilization: 78.9%  
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	51.0%	2,398	1,626	97.3%	70.1%	Improvement Needed
Distribution Center B	Dallas, TX	60.8%	1,668	3,022	98.8%	93.2%	Optimized
Distribution Center C	Atlanta, GA	119.6%	2,105	3,404	95.7%	79.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	69.2%	1,382	2,288	98.4%	75.0%	Improvement Needed
Distribution Center E	Newark, NJ	65.5%	1,360	2,903	95.3%	76.3%	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