

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 81  
Average Utilization: 75.1%  
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	80.1%	1,466	2,391	96.6%	64.1%	Improvement Needed
Distribution Center B	Dallas, TX	56.2%	2,379	3,256	95.8%	76.0%	Improvement Needed
Distribution Center C	Atlanta, GA	48.0%	2,523	3,494	97.5%	79.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	76.9%	1,885	2,948	98.0%	61.4%	Improvement Needed
Distribution Center E	Newark, NJ	71.9%	1,811	2,050	98.2%	94.8%	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