

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 60  
Average Utilization: 75.5%  
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	89.9%	1,875	3,163	95.7%	63.6%	Improvement Needed
Distribution Center B	Dallas, TX	64.6%	1,489	3,117	96.4%	78.1%	Improvement Needed
Distribution Center C	Atlanta, GA	95.2%	1,966	1,981	95.1%	90.2%	Optimized
Distribution Center D	Los Angeles, CA	61.6%	2,709	2,855	97.2%	69.8%	Improvement Needed
Distribution Center E	Newark, NJ	36.1%	1,631	3,722	95.2%	76.0%	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