

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 57  
Average Utilization: 82.9%  
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	64.7%	2,891	3,950	97.7%	79.8%	Improvement Needed
Distribution Center B	Dallas, TX	74.2%	2,524	1,746	96.4%	88.2%	Optimized
Distribution Center C	Atlanta, GA	46.5%	1,813	2,138	98.1%	75.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	81.9%	2,166	3,211	99.1%	89.7%	Optimized
Distribution Center E	Newark, NJ	89.2%	1,981	3,588	95.4%	81.3%	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