

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 53  
Average Utilization: 76.1%  
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	76.7%	1,709	3,311	97.2%	75.1%	Improvement Needed
Distribution Center B	Dallas, TX	64.2%	1,627	1,678	98.3%	79.3%	Improvement Needed
Distribution Center C	Atlanta, GA	91.5%	2,457	3,573	98.6%	68.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	41.4%	2,808	2,577	96.3%	93.4%	Optimized
Distribution Center E	Newark, NJ	82.5%	2,847	2,765	98.0%	64.0%	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