

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 44  
Average Utilization: 71.1%  
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	45.2%	1,118	2,704	95.5%	62.4%	Improvement Needed
Distribution Center B	Dallas, TX	82.1%	2,686	2,422	96.4%	70.2%	Improvement Needed
Distribution Center C	Atlanta, GA	88.3%	1,641	2,555	96.0%	63.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	68.4%	1,723	3,404	96.5%	65.9%	Improvement Needed
Distribution Center E	Newark, NJ	101.4%	2,950	3,883	95.9%	93.7%	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