

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 58  
Average Utilization: 73.8%  
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	54.6%	2,683	1,736	96.9%	68.6%	Improvement Needed
Distribution Center B	Dallas, TX	120.2%	1,251	2,475	95.5%	84.9%	Optimized
Distribution Center C	Atlanta, GA	64.5%	1,433	1,565	97.2%	76.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	92.8%	2,112	1,514	95.1%	64.9%	Improvement Needed
Distribution Center E	Newark, NJ	55.7%	1,529	1,862	95.6%	73.8%	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