

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 33  
Average Utilization: 74.3%  
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	47.7%	1,537	3,203	98.2%	74.9%	Improvement Needed
Distribution Center B	Dallas, TX	69.1%	1,710	1,901	95.6%	74.4%	Improvement Needed
Distribution Center C	Atlanta, GA	70.7%	2,718	3,879	96.6%	67.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	33.9%	2,623	3,098	98.1%	71.2%	Improvement Needed
Distribution Center E	Newark, NJ	80.2%	1,147	2,226	97.2%	83.3%	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