

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 61  
Average Utilization: 75.5%  
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	64.0%	1,862	2,011	97.2%	72.3%	Improvement Needed
Distribution Center B	Dallas, TX	90.8%	1,041	3,396	98.7%	73.5%	Improvement Needed
Distribution Center C	Atlanta, GA	45.1%	2,545	1,780	97.6%	79.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	78.0%	2,389	2,586	98.9%	64.5%	Improvement Needed
Distribution Center E	Newark, NJ	96.7%	1,474	1,753	98.5%	88.0%	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