

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 50  
Average Utilization: 76.7%  
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 Status	
Distribution Center A	Chicago, IL	65.8%	2,573	3,826	96.6%	91.8%	Optimized
	Dallas, TX	38.3%	2,970	3,053	95.4%	65.0%	Improvement Needed
Distribution Center B	Atlanta, GA	40.6%	2,311	1,509	97.5%	73.8%	Improvement Needed
Distribution Center C	Los Angeles, CA	30.4%	2,196	1,529	98.3%	63.3%	Improvement Needed
Distribution Center D	Newark, NJ	78.0%	1,430	1,800	98.4%	89.6%	Optimized
Distribution Center E							

## Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement AI-driven inventory tracking in Warehouse 1

ment voice-  
picking  
system to  
improve  
accuracy to  
99.8%

- Upgra  
de WMS  
integration  
for real-time  
inventory  
visibility

- Add au  
tomated  
sortation  
system for  
small  
package  
handling

- Imple  
ment  
predictive  
analytics for  
demand-  
based  
staffing

- Consid  
er AS/RS  
system for  
high-  
velocity  
SKUs