

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 43  
Average Utilization: 75.9%  
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	102.1%	1,302	3,724	99.0%	87.3%	Optimized
	Dallas, TX	78.6%	2,599	2,791	96.0%	64.9%	Improvement Needed
Distribution Center B	Atlanta, GA	65.0%	1,924	1,732	98.3%	88.8%	Optimized
Distribution Center C	Los Angeles, CA	94.4%	2,498	1,584	95.3%	78.1%	Improvement Needed
	Newark, NJ	36.7%	2,758	3,214	98.9%	60.6%	Improvement Needed

## Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for robotic arms

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