

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 30  
Average Utilization: 71.7%  
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 Level	Status
Distribution Center A	Chicago, IL	88.5%	2,735	2,256	97.0%	68.5%	Improvement Needed
Distribution Center B	Dallas, TX	57.5%	1,513	3,513	96.2%	80.5%	Optimized
Distribution Center C	Atlanta, GA	57.9%	1,969	2,826	98.0%	62.6%	Improvement Needed
Distribution Center D	Los Angeles, CA	77.9%	2,257	3,866	96.1%	81.6%	Optimized
Distribution Center E	Newark, NJ	69.3%	2,808	3,486	99.5%	65.1%	Improvement Needed

### 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