

# Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

## Automation Overview

Total Warehouses: 5  
Total Robots: 74  
Average Utilization: 65.4%  
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     | 85.5%         | 2,583       | 2,165        | 97.6%            | 61.0%            | Improvement Needed |
| Distribution Center B | Dallas, TX      | 59.8%         | 2,258       | 2,877        | 95.6%            | 68.0%            | Improvement Needed |
| Distribution Center C | Atlanta, GA     | 75.5%         | 2,733       | 3,343        | 99.2%            | 68.5%            | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 105.5%        | 2,103       | 3,437        | 98.2%            | 64.0%            | Improvement Needed |
| Distribution Center E | Newark, NJ      | 127.8%        | 2,833       | 1,632        | 99.1%            | 65.5%            | Improvement Needed |

## 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