

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 47  
Average Utilization: 79.4%  
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	53.3%	2,212	2,154	98.2%	79.3%	Improvement Needed
Distribution Center B	Dallas, TX	55.1%	2,393	3,607	99.0%	62.4%	Improvement Needed
Distribution Center C	Atlanta, GA	46.6%	2,101	3,835	96.8%	90.3%	Optimized
Distribution Center D	Los Angeles, CA	110.7%	1,402	2,103	95.2%	84.4%	Optimized
Distribution Center E	Newark, NJ	66.6%	2,991	3,881	99.3%	80.6%	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