

# 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: 79.1%  
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	106.6%	2,468	2,932	97.2%	68.1%	Improvement Needed
Distribution Center B	Dallas, TX	59.2%	2,556	2,220	98.4%	72.3%	Improvement Needed
Distribution Center C	Atlanta, GA	69.4%	2,261	2,419	99.4%	82.3%	Optimized
Distribution Center D	Los Angeles, CA	57.6%	1,114	2,068	98.7%	92.2%	Optimized
Distribution Center E	Newark, NJ	58.9%	2,012	1,997	96.4%	80.7%	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