

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 62  
Average Utilization: 71.1%  
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	37.6%	1,185	2,084	97.2%	81.6%	Optimized
Distribution Center B	Dallas, TX	91.0%	2,731	3,521	98.7%	76.6%	Improvement Needed
Distribution Center C	Atlanta, GA	62.4%	1,407	2,124	95.7%	61.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	107.1%	2,970	2,504	97.3%	72.5%	Improvement Needed
Distribution Center E	Newark, NJ	43.7%	2,904	3,394	96.2%	63.6%	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