

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 34  
Average Utilization: 70.9%  
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 Status		
Distribution Center A	Chicago, IL	61.2%	1,693	3,336	96.7%	82.0%	Optimized	
	Dallas, TX	95.1%	1,258	2,982	98.4%	74.4%	Improvement Needed	
Distribution Center B		Atlanta, GA	81.4%	2,339	1,891	97.9%	65.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	100.3%	1,336	2,757	98.6%	62.9%	Improvement Needed	
Distribution Center E	Newark, NJ	48.9%	1,353	1,875	97.3%	69.8%	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